

Medicine

The Present Status of ACTH, Cortisone and Hydrocortisone in the Treatment of Rheumatoid Arthritis

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The advent of the adrenal steroids in the field of modern therapy has made it necessary that the present day physician make himself thoroughly conversant with the functions of the adrenal cortex. The effect of these hormones on intermediate metabolism is now well established, and regardless of the role which they may eventually play in the everyday practice of medicine, it is important that one understands their mode of action.

Of all the endocrine glands, the adrenal cortex is perhaps the most important and possibly the most complex, from the point of view of its effect on the physiological state of the tissues of the body. It is dominated only by the anterior pituitary, upon which it is nearly completely dependent for its functional activity, through the stimulation it receives from the adrenocorticotrophic principle. A continual secretion of ACTH is essential for the maintenance of the normal size and architecture of the adrenal cortex and is also essential for the response of the gland to the varying needs of the animal in times of stress. Removal of the pituitary is followed by marked atrophy of the adrenal cortex, and functionally, hypophysectomized animals exhibit most of the changes shown by adrenalectomized animals. The action of ACTH, either endogenous or exogenous, is first to stimulate the formation and secretion of adrenal steroids, and secondly to induce enlargement and hypertrophy of the adrenal cortex. It follows from this that ACTH is inactive in the absence of the adrenal cortex.

Of some 28 known crystalline steroids isolated from the adrenal cortex, only 6 have so far been found to have significant biological activity. They are the C21 oxysteroids.

1. 11 desoxycorticosterone — ("DOC").
2. 11 dehydrocorticosterone (Kendall — "A").
3. corticosterone (Kendall — "B").
4. 17 hydroxy 11 dehydrocorticosterone (Kendall — "E").
5. 17 hydroxycorticosterone (Kendall — "F").
6. 17 hydroxy 11 desoxycorticosterone (Reichstein — "S").

Desoxycorticosterone (electrolyte hormone) has been in clinical use for the longest period, in the

treatment of Addison's disease, although it is not generally believed to be the natural electrolyte hormone of the adrenal. It now appears that the recently isolated adrenal steroid, aldosterone (electrocortin), represents the true electrolyte hormone of the adrenal cortex. Aldosterone is about 25-30 times more potent than desoxycorticosterone, and will probably replace the latter in the treatment of Addison's disease. The other steroids, compounds "A", "B", "E", "F" and "S" are commonly referred to as the glucocorticoids, because of their effect on carbohydrate metabolism. In addition to these however, the adrenal secretes steroids with androgenic, estrogenic and progestational activity, but they are of little importance.

Even after removal of the above crystalline steroids from adrenal cortical extracts, the residual amorphous fraction or non-crystalline residue is still very active and contains from 10-50 per cent of the total activity of the original crude extract. It is thus apparent that our knowledge of the adrenal cortex is far from complete.

While the 6 steroids listed are biologically active, in that they are capable of correcting to varying degrees the abnormal changes produced by adrenalectomy, only 3 have attained widespread therapeutic application. They are:

11 desoxycorticosterone, as mentioned earlier, and

17 hydroxy 11 dehydrocorticosterone (compound "E") (cortisone) and

17 hydroxycorticosterone (compound "F") (hydrocortisone). The latter two, along with ACTH, have gained prominence because of their actions on the processes of inflammation, hypersensitivity, resistance to stress and on general well being. Compound "F" is more potent than compound "E" and may be up to 30 per cent more effective in treatment. It has another advantage in that it is more effective locally or topically. Occasionally ACTH may be observed to be more effective than either steroid, although in the average case there is little to choose between them. Because of its earlier introduction and economic advantages, cortisone has enjoyed greater popularity than either of the others.

Cortisone had been isolated and its chemical structure known for many years before it was synthesized in amounts sufficient for the first clinical trial in 1948, in patients with rheumatoid arthritis, rheumatic fever and Addison's disease. It is a little ironical that the disease in which it was first used, rheumatoid arthritis, has not

proven to be its most useful therapeutic application. Perhaps the most valuable contribution it has made, is the demonstration that the disease process is potentially reversible, with the hope that eventually a more effective remedy will be found.

Virtually nothing is known of the action of these hormones in disease states, except that it is directed principally against the processes of inflammation and hypersensitivity, acting at the cellular level. They are suppressive only, reducing tissue reactivity to a multitude of agents. The specific cause of the illness, however, is not removed, and while symptoms may be suppressed to a varying degree during the period of administration, the eventual outcome always depends on the natural course of the disease, which is unaffected by the treatment. For this reason, best results are obtained in diseases of self-limiting or remitting character, where the treatment can be applied during the symptomatic period and successfully withdrawn during the remission or after it has run its course. In chronic, progressive diseases, the beneficial results are temporary, and relapses are the rule after withdrawal of the hormone. Unfortunately, rheumatoid arthritis falls into this category.

Failure to response to treatment with these hormones may be due to a number of factors:

- (a) Disease not responsive.
- (b) Inadequate dosage.
- (c) Hormone resistance (especially to ACTH).
- (d) Hormone low in potency (especially with ACTH).

The best guide to dosage is the clinical response, although other indices may be used, such as a decrease in the sedimentation rate, fever, etc. However, we have learned from experience not to attempt to bring the sedimentation rate back to normal levels, since the large doses often required to do so may lead to undesirable side effects. The circulating eosinophil count is not a useful index to dosage. When ACTH is used, however, the eosinophil count is a useful guide to determine the potency of the preparation. This can readily be checked by means of the so-called "Thorn Test". It requires a drop in the eosinophil count in excess of 50%, four to six hours after the injection of 25 units of ACTH intramuscularly. If, for example, 50 units are required to produce a drop in excess of 50% in normal individuals, it is an indication that the ACTH is approximately one half of its labelled potency. When this procedure is being used as a screening test for Addison's disease, one can avoid equivocal results by administering the ACTH in a slow intravenous drip over a period of 8 hours, or more simply by use of a good depot preparation ACTH (Duracton or H.P. ACTHARGEL) in a dose of 25-50 units intramuscularly. In such circumstances the eosinophil count should be performed initially, and at the end of 4 and 8

hours. Measurements of the urinary steroids will give more accurate information of the degree of adrenal stimulation achieved, but require refined laboratory techniques.

One cannot question the dramatic manner in which these hormones are able to relieve pain, and suppress the inflammatory process in the affected joints. Beneficial systemic effects can also be demonstrated such as the disappearance of fever, correction of the secondary anemia and improvement in the nutritional state. The effects on the disease may be reflected in other ways, such as a decrease in the sedimentation rate and plasma fibrinogen, which serve as an index of the activity of the inflammatory process. With the administration of large doses of the hormones both may drop to low levels, but promptly rise again with the relapse which accompanies the cessation of treatment. This can often be repeated over and over again. Sometimes, particularly in severe cases, the relapse after withdrawal of therapy may be very sharp indeed, appearing more acute than before the institution of therapy, with involvement of joints previously unaffected. These marked rebound effects may not be reflected by the sedimentation rate, which cannot exceed certain limits but is indicated by the extreme rise in the plasma fibrinogen.

Early in our experience with these agents, it was only natural that they were tried in our most severe cases of rheumatoid arthritis, who had progressed unfavourably in spite of all available measures. Because of the large doses required to effect reasonable improvement in these patients, it was frequently necessary to discontinue the treatment because of the many undesirable side effects or actual toxicity of the drugs. The commonest of these have been the moon-facies or Cushing-like appearance of the face, hirsutism, acneiform eruptions and trunk obesity. More serious complications have included cardiac insufficiency and dependent edema due to salt and water retention, and with prolonged administration a few patients have exhibited a moderate hypertension. This is of particular importance in older subjects and in patients with cardiovascular or renal diseases. Less frequently, one may encounter profound muscular weakness due to potassium depletion.

In the average patient, cortisone or ACTH have no effect on carbohydrate tolerance, indicating that there is usually an adequate pancreatic islet reserve. In a few instances, however, some impairment of carbohydrate tolerance may be apparent, short of a diabetic state. More rarely, frank diabetes may be induced, necessitating the use of insulin, but this is uncommon except in patients with a pre-existing borderline carbohydrate tolerance. The effect is not permanent and

corrects itself when the treatment is stopped, or with a reduction in the dose.

When administered in large doses, these hormones have an antianabolic action in regard to nitrogen metabolism. They tend to inhibit protein synthesis, so that a negative nitrogen balance is often induced, associated with an increased urinary excretion of ammonia, uric acid, urea, creatine, amino-acid and total nitrogen. It is usually difficult to counteract this effect, even with a high protein intake. This nitrogen loss is of course undesirable and bears a striking resemblance to the protein loss which accompanies the fasting state or starvation, and which, incidentally, also is associated with an improvement in the rheumatic process. It suggests that the beneficial effects of cortisone or ACTH may be related to this action of the hormones, an aspect of the problem which is presently under study.

A knowledge of these actions of the hormones explains why certain diseases may be aggravated by these agents, such as:

- Congestive Heart Failure.
- Essential Hypertension.
- Chronic Renal Disease.
- Cushing's Syndrome.
- Diabetes Mellitus.

Other diseases, for various reasons, may also be aggravated, including:

Pulmonary tuberculosis, because of interference with fibroblastic proliferation and localization of the infection.

Osteoporosis, because of the excessive calcium loss which accompanies the nitrogen loss.

Peptic ulcer, because of the stimulation of gastric secretion of hydrochloric acid and pepsin.

Myasthenia gravis, because of the muscular weakness which may accompany potassium depletion.

Although the diseases listed above may be regarded as contraindicating the use of cortisone or ACTH, they are not absolute contraindications, providing that the need for the treatment is adequately indicated and proper precautions are taken. More serious complications which have been encountered include:

- Myocardial infarction.
- Gastrointestinal bleeding.
- Perforation of a viscus.
- Spontaneous fracture.
- Psychotic states.

Most of these serious complications have been encountered in the more seriously ill patients who have required large doses of hormone, which in the light of our present knowledge would now be regarded as excessive. With the smaller doses currently in use, such complications have become uncommon.

Normally, the pituitary and the adrenal cortex are in a state of physiological balance. It is

important to remember that the prolonged administration of ACTH results in a suppression of the pituitary, while cortisone suppresses both the pituitary and the adrenal cortex. The sudden withdrawal of either hormone after prolonged use may give rise to symptoms of adrenal insufficiency. In the face of complications necessitating surgical interference or in the presence of serious infections, the treatment should never be stopped abruptly, but continued at least until the patient has passed beyond the danger period, and then reduced slowly. In emergency situations it may even be necessary to increase the dose temporarily to avoid adrenal insufficiency, and the medication may have to be administered intravenously.

While much that has been said has presented the less favourable side of the picture, these agents may be used intelligently to considerable advantage. In rheumatoid arthritis, it is important to remember that cortisone and ACTH in no way replace the long established supportive measures which have been used in the treatment of this disease, such as the proper understanding of the illness, rest, and physical measures designed to maintain or increase the range of movement and functional capacity of the affected joints. In fact, these measures may be even more important when one employs cortisone, since the patient may further traumatize the inflamed joints with the increased activity permitted by the suppression of pain. It has been shown that the destructive process in the affected joints may continue in spite of the symptomatic relief. There is no good evidence that the combination of other agents with cortisone such as gold, potentiates the treatment in any way.

We have now learned not to use these agents in the more severely ill patients who require large doses, except in extenuating circumstances where there appears to be no other alternative. Similarly, in mild cases which can be controlled with more conservative measures, we tend to avoid these agents. However, there remains an appreciable group of patients with rheumatoid arthritis, in whom the disease may not be regarded as severe, yet it may give rise to sufficient disability to interfere with employment or even necessitate hospitalization. Conservative treatment should always be given the first trial, but it may be unsuccessful in checking the progress of the disease. It is in this group that cortisone, hydrocortisone or ACTH may prove to be of considerable value. Hospitalization may be avoided or shortened and disabled victims can often be successfully rehabilitated. One must however, realize the risk of further progression to a more severe stage of the disease, in spite of the treatment. Instances may be encountered where the symptoms are well controlled for the most part, but one or two joints remain active and threaten to break down the

successful continuation of the program. Rather than increase the dose systemically, the problem can often be more successfully managed by treatment of the stubborn joint with local injections of hydrocortisone at intervals of about a week apart. Monarticular arthritis may, of course, be managed in this way without resort to systemic therapy. At all times, an attempt should be made to maintain the patient on the smallest possible dose commensurate with safety and satisfactory control of the disease, such as 75 mgs. of cortisone or less, 60 mgs. of hydrocortisone or less, or 10 units of a long acting preparation of ACTH or less, daily. In rheumatoid arthritis, it is probably unwise to use interrupted courses of treatment because of the danger of severe aggravation during the relapse period, although other diseases such as ankylosing spondylitis may sometimes be managed successfully in this way without risk. In general, once started, patients with rheumatoid arthritis should be prepared to continue the treatment for a prolonged or indefinite period.

Results in Rheumatoid Arthritis

Clinical reports on the long term evaluation of steroid therapy in patients with rheumatoid arthritis are only now beginning to appear in the literature. Results of the treatment will of necessity differ to some extent from one series to another, because of the very nature of the disease and variations in the duration and severity of the illness in the cases undertaken for study. Results obtained in an office practice would naturally be expected to be superior to that obtainable in hospitalized patients, since the more severely ill patients find their way into hospitals.

Our own material, reviewed for the four year period 1951-1955, is fairly representative of the experience reported in other series. However, unlike the recent reports in the American literature, we have separated the patients with ankylosing spondylitis from those with rheumatoid arthritis. Because of the more favorable prognosis in the former, results in this group on the whole tend to be better. The present report deals only with our observations in patients with rheumatoid arthritis, all of whom were sufficiently severe to necessitate their admission to hospital. The majority would be graded as Stage II, III, or IV (American Rheumatism Association).

Of 81 patients initially selected for this form of therapy, it was found necessary to discontinue the treatment in 47 for various reasons. These included inadequate response to reasonable doses of hormone, undesirable side effects, serious complications or death of the patient (Table I). Only 34 patients responded in a manner which appeared to warrant continuation of the treatment on a long term basis. All of these have been on the treatment program for at least a year and most of

Table I

Rheumatoid Arthritis: Steroid Therapy: 1951-55

	Patients
Selected for ACTH or steroid therapy	81
Suitable for prolonged therapy	34
Unsuitable for prolonged therapy	47
Died	3
Death related to treatment	0

them for 2 to 4 years. Some indication of the practical application of this form of treatment may be indicated when one considers that only one out of 10 hospitalized patients (10%) were considered suitable for a trial, and only 1 out of 25 (4%) were found suitable for prolonged therapy. While these figures may appear small, these hormones have nevertheless contributed materially to the reduction of in-patient care of patients with this disease. Three patients in the series died of causes unrelated to treatment.

Only 4 patients obtained a remission which persisted after treatment was stopped. All of these were mild cases (Stage I) (Table II). While

Table II

Rheumatoid Arthritis: Steroid Therapy: 1951-55

	Patients
Remission	4
Major improvement	37
Minor improvement	16
No benefit or worse	24
Total	81

Employable before treatment	6
Employable after treatment	34

70% experienced worthwhile improvement, some of these were discontinued because of complications, and nearly a third derived no benefit or were made worse by the treatment. However, the benefit to those who were rendered employable or self-sufficient is obvious. On the whole, better results were obtained in the milder cases with a short history. (Table III).

Table III

Rheumatoid Arthritis: Steroid Therapy: 1951-55
Relation of Response to Duration of Disease

	No. Cases	Major Improvement	Minor Improvement	No. Benefit
Less than 1 year	5	4	1	0
1-10 years	44	22	11	11
10 years or more	32	15	4	13

Serious complications encountered during the course of treatment are shown in Table IV. To what extent these could be attributed directly to the form of therapy is open to speculation, but it would be difficult to dissociate them entirely.

Table IV

Rheumatoid Arthritis: Steroid Therapy: 1951-55
Serious Complications
(81 patients)

	Patients
Hypertension (reversible)	11
Diabetes Mellitus (reversible)	6
Spontaneous fracture	4
Abscess	3
Gastrointestinal bleeding	3
Perforation of Viscus	1
Myocardial Infarction	2
Psychosis	5

Before closing, some mention might be made regarding current progress in the field of the steroid hormones. The introduction of a halogen

(Br, Cl, or F) to the 9-carbon position in hydrocortisone has been found to enhance greatly the effectiveness of this hormone. Thus, 9 alpha bromohydrocortisone, 9 alpha chlorohydrocortisone and 9 alpha fluorohydrocortisone are 5-20 times as potent as hydrocortisone, necessitating doses of only a few milligrams a day. They are likely to be of value in Addison's disease but not in general therapy because the salt retaining effect is also greatly enhanced. Lastly, two new derivatives have recently been introduced, metacortandralone and metacortandracin. Since the electrolyte effect has been greatly reduced in these derivatives, while still retaining their antiphlogistic properties, they offer definite advantages. Moreover their potency is at least 2-5 times that of cortisone, necessitating lesser dosage schedules. This advance is a step in the right direction and spells good news for the arthritic patient, since it brings with it the hope that superior forms of treatment are in the offing.

Pheochromocytoma, A Curable Cause of Hypertension

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Pheochromocytoma is the name applied to adrenal medullary tumors of chromaffin tissue. Extra-adrenal chromaffin tissue may also give rise to a functioning-tumor, along the aorta, in the thorax, or in the neck. The first case was described in 1886. In 1922 the clinical syndrome was adequately described. In 1927 C. H. Mayo first successfully resected a pheochromocytoma in a patient with paroxysmal hypertension. By 1952, about 150 tumours had been surgically removed¹.

The tumour, though relatively rare, is an important curable cause of hypertension. It occurs in about 1 in 200 patients tested for pheochromocytoma.² It is apparent that among the great number of hypertensives, there are many with this condition. The problem then becomes one of diagnosis.

Clinical Picture

The patient may present in two main ways, with attacks of paroxysmal hypertension, or with sustained hypertension. The paroxysms usually are characterized by headache, palpitations, tachycardia, hypertension, anxiety, nervousness, numbness and coldness of the hands, facial pallor, and profuse sweating, generally at the end of an attack^{1,3}. The attacks may last from minutes to days. Frequently sudden turning, exertion, or the induction of anesthesia may precipitate an attack. A patient in whom hypertension is induced by an anesthetic, should be suspected of having a pheochromocytoma.

Patients with pheochromocytoma may have a persistent hypertension, that mimics perfectly an essential hypertension. The lesion should be particularly suspected in children and young adults with a severe hypertension. It is practically an invariable finding that these patients are underweight. Associated, there may be an elevated basal metabolic rate, and glycosuria with hyperglycemia. Thus, hyperthyroidism and diabetes mellitus may be mistakenly diagnosed. If essential hypertension is diagnosed, and the patient treated with hexamethonium, there may be a very poor response, with wide swings of blood pressure⁴. The fundus picture may be suggestive to the ophthalmologist. The fundus may show the picture of hypertension of any grade but without evidence of sclerosis or chronicity. There are other causes for this fundus picture, so the ophthalmologist can suggest, but cannot diagnose a pheochromocytoma.

Tests for Pheochromocytoma

The diagnosis generally depends upon pharmacologic tests. Generally these tests are reliable if performed properly, but false positives and negatives may occur. For patients seen between suggestive paroxysmal attacks while normotensive, drugs that will produce an attack are used. These include histamine, tetraethylammonium chloride, and methacholine hydrochloride (mecholy). The use of histamine as a provocative test agent was reported by Roth and Kvale in 1945. The rise from the basal blood pressure after one minute with a hand immersed in ice water (cold pressor test) is compared to the rise seen two minutes after the intra-venous injection of 0.025 or 0.05 mgm. of histamine base. If the rise is greater after histamine, the test is positive. The attack produced is identical with the spontaneous paroxysmal attacks. If the test is positive, and a marked hypertensive response occurs, it is wise to give 5 mgm. of Rogitine intra-venously, and terminate the attack. The entire procedure cannot be done hurriedly, as basal blood pressures must be recorded before the pressor responses to cold and then histamine are elicited. Narcotics, sedatives, and other hypotensive agents may give false positive results. Their effects should have worn off before the tests are performed.

In patients with sustained hypertension due to pheochromocytoma, regitine (rogitine in Canada), and dibenamine are used to lower the blood pressure. They act by blocking the pressor effect of the epinephrine and nor-epinephrine that the tumor secretes.

Regitine is a particularly safe and useful drug. It is best given intra-venously, as this is a more reliable method than the intra-muscular administration. When given to normals and patients with essential hypertension, the fall in blood pressure seldom exceeds 35 mm. of Hg systolic, and 25 mm.

of Hg diastolic. In patients with a pheochromocytoma and sustained hypertension, the fall from the basal pressures generally exceeds the values quoted. The Regitine test is probably the easiest test to perform, as a screening test for pheochromocytoma in patients with hypertension. False positive results may occur in patients with uremia, if sedation has been used prior to the test, with a basal blood pressure in the low hypertensive ranges, and occasionally in other patients with essential hypertension⁴.

Recently, chemical estimations of epinephrine and nor-epinephrine in the blood, and of pressor substances in the urine, have been used to help in the diagnosis of pheochromocytoma. These estimations are not available generally. The blood measurements have been particularly reliable, though again provocative tests may be necessary to give elevated values in patients with normal pressures^{5,6}.

Pathology¹

About 60% of the tumors occur on the right, 30% on the left, and 10% are bilateral or multicentric. A familial incidence of the tumor has been noted⁷. Only a small per cent are large enough to be palpable clinically, but tumors up to 18 cm. in diameter have been described. Large blood vessels may course over the surface of the tumor. The cut surface is frequently solid, but degenerative zones with hemorrhage, necrosis and cyst formation are common in large tumors. The cells are most often polygonal, with round or oval nuclei, and large nucleoli. Mitoses are infrequent. The cytoplasm is granular, and may show melanin and hemosiderin particles as well as chromaffin granules. The cells are arranged in alveolar clusters. Blood vessel invasion is not evidence of malignancy. It is not possible to tell from the histology if a tumor is malignant, unless metastases occur. Metastases occur in about 10% of cases.

Pathologically one may also see the sequelae of hypertension. Von Recklinghausen's neurofibromatosis occur in some 5% of cases.

Surgery⁸

As 10% of the tumors are bilateral, and as about the same per cent may be outside the adrenal, and as metastases may be present, general abdominal exploration and exploration of both adrenals should be performed. An abdominal approach is used by Priestley, and is described by him. The main blood supply of the tumour should be clamped as soon as possible. The tumor should be handled as little as possible, to prevent paroxysms of hypertension. During surgery the blood pressure should be recorded about every minute and pressor or depressor substances given as indicated. The failure of the pressure to fall after removal of the tumor suggests a further tumor,

or metastases. For several days after surgery, frequent blood pressure records should be kept. The pressure is kept over 100 mm. Hg systolic by pressor agents. If both adrenal glands are removed or handled adrenal cortical failure must be guarded against and treated energetically if it occurs.

Summary

Pheochromocytoma is a curable cause of hypertension. It may mimic perfectly essential hypertension, or present with paroxysmal attacks. Pharmacologic tests are available to test for the tumor. Chemical estimations of pressor substances can also be made. The pathology of, and surgery for the condition are briefly discussed.

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Diphtheria Toxoid, Pertussis Vaccine and Tetanus Toxoid Combined (Connaught)

The Department of Health and Public Welfare wishes to announce that on and after September 1st, 1955, this triple antigen will be available in Manitoba only in the double strength or ½ cc. dosage which will entirely replace the older 1 cc. dose strength.

The material will be packaged as follows:

- a) individual size package—1½ cc. rubber stopped vial providing three doses for one person;
- b) multiple dose (clinic size) package—a box containing four 55 cc. ampoules, (40 doses).

The material will bear red printed labels to distinguish it from all 1 cc. dose antigens.

This antigen has been tested in three health unit areas in Manitoba during the past year and has also received extensive clinical trials in Ontario under close supervision of the Connaught Medical Research Laboratories. It has been found to be satisfactory in that no more reactions are observed than with the 1 cc. strength and it has the added advantage of the smaller dose which causes less distension of tissues and, therefore, less pain.

Surgery

Injury to the Intrathoracic Viscera from Non-Penetrating Wounds of the Chest

Walter Robert Schmidt, M.D.

It would almost seem that nature has conspired to protect the intrathoracic viscera from injury since of all the non-penetrating injuries of the chest one sees only a few who have enough serious injury to the intrathoracic viscera to require surgical intervention. Consequently, when the physician is suddenly faced with treating these emergencies he may find himself somewhat unfamiliar with the problems encountered. Because of the emergency nature of these injuries it is essential that they be promptly recognized and effective therapy immediately instituted if the

nosis since the air from the pneumothorax may escape through a tear in the parietal pleura and infiltrate the subcutaneous tissues. (see Fig. 1)

Treatment of a traumatic pneumothorax is simple. We prefer the use of an intercostal catheter introduced through a trocar under local infiltration anesthesia. The catheter can be attached to an underwater seal or better to a chest suction apparatus. (see Fig. 1a)

Occasionally after establishing intercostal drainage the lung will fail to expand and the air leak will be very profuse. Under these circumstances, one may assume that the tear or laceration in the lung involves a bronchus. Open thoracotomy with surgical repair of the defect should be done without delay. These patients appear so desperately ill that thoracotomy at first thought would seem

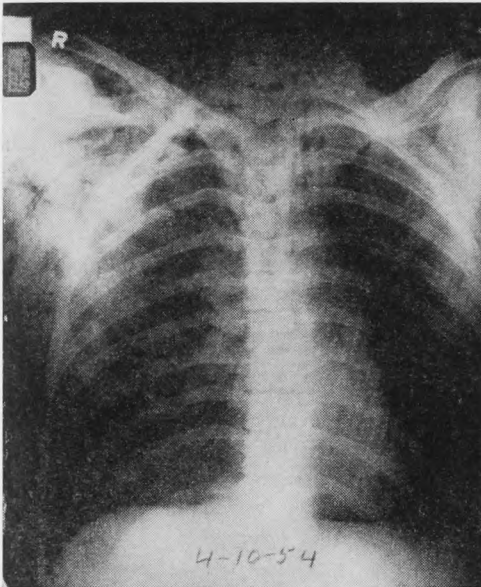


Figure 1

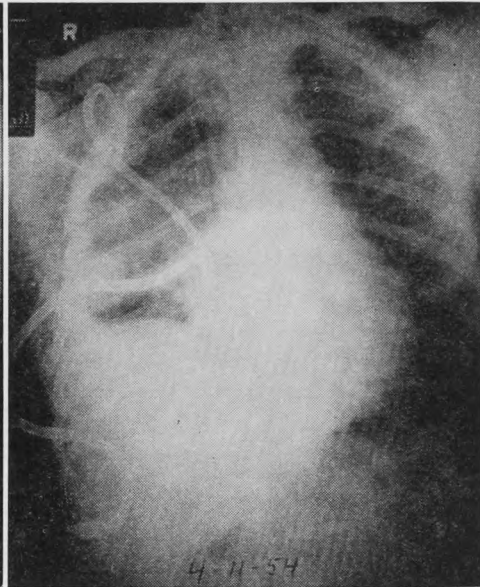


Figure 1A

patient is to survive. For this reason it seems appropriate to review several cases that illustrate the various types of intrathoracic injury that require surgical intervention.

The commonest injury seen is that of a simple tear of the pulmonary parenchyma. Unless the pleural space has been obliterated by a previous pleuritis, a traumatic pneumothorax appears. As the pneumothorax increases, a tension pneumothorax frequently develops with severe and sometimes fatal interference with cardiorespiratory function. The diagnosis can easily be established by an upright film of the chest. Films taken in the prone position may not reveal the pneumothorax. No patient is too ill to permit obtaining an adequate chest x-ray. Frequently the presence of subcutaneous emphysema will lead to the diag-

to be contra-indicated; however, as soon as the patient is intubated and placed on controlled respiration under anaesthesia, his condition will improve markedly since the effective exchange under anesthesia is greatly improved. It is advisable to use a Carlen's type double lumen intratracheal tube so as to provide effective exchange to the unimpaired lung until the laceration can be closed on the involved side. When a bronchial tear occurs the affected bronchus may be of a large caliber and the rupture may involve almost the entire circumference. Surgical repair in this situation will prevent the otherwise certain sequelae of bronchial stenosis with loss of pulmonary function. The result of thoracotomy in this group of extremely ill patients has been most gratifying. (see Fig. 2)

Rupture of the left hemidiaphragm must always be considered in crushing wounds especially with fractures involving the lower ribs on the left side. The right hemidiaphragm is less frequently injured.¹ The diagnosis may be difficult since the condition may be similar to that seen with a simple hemothorax. Signs of obstruction of the gastrointestinal tract shortly after chest injury (obstipation, abdominal distention), abdominal pain and left upper quadrant tenderness should always suggest a herniation of bowel through a rent in the diaphragm. Occasionally the stomach alone will herniate in which case the patient will have no abdominal distention but will frequently have hematemesis.² X-rays may or may not be

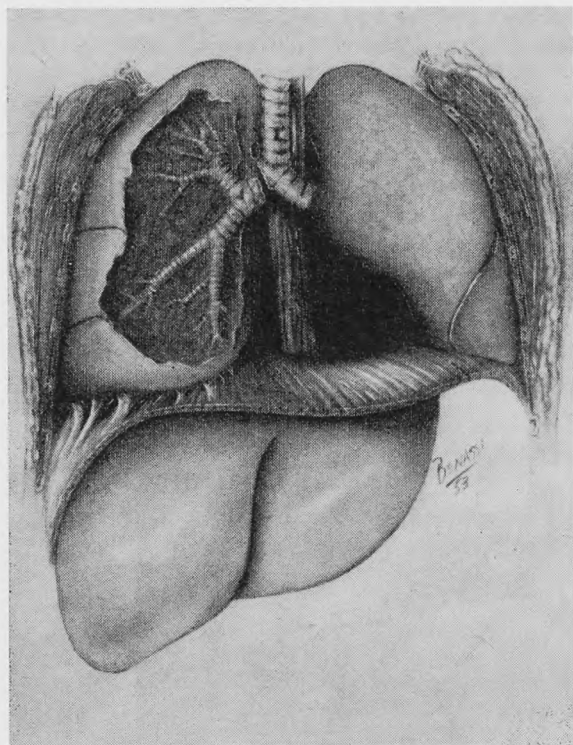


Figure 2

diagnostic. One may see an opacity in the left lower chest with a shift of the heart and mediastinum to the right. This is hard to distinguish from a hemothorax. A visible loop of bowel containing fluid and air is, of course, diagnostic. Frequently the x-ray will reveal what appears to be a markedly elevated diaphragm. Here the superior wall of a stomach distended with air and herniated into the chest will cast a shadow that simulates an elevated diaphragm. (see Fig. 3) Barium contrast studies of the stomach and large bowel are helpful. Proper diagnosis will be arrived at only if the physician constantly keeps in mind the possibility that such an injury may have taken place. Repair of the defect with replacement of the abdominal viscera is usually necessary if the patient is to survive.

It is not within the scope of this paper to explore all phases of traumatic heart disease. While it is rare, there is an occasional significant injury to the cardiac muscle following non-penetrating wounds of the chest.^{3, 4} In young individuals with a very flexible thoracic cage it is conceivable that the sternum might be markedly depressed and even approximated to the spine without production of a fracture.^{5, 6} In our somewhat limited experience we have seen several patients with hemopericardium following non-penetrating wounds and has been reported by Barber.⁷ The contused areas may be multiple and located at various levels either superficially or in the endocardium.⁸ We have noted as reported by Barber⁷ that some time may elapse between the time of injury and the appearance of signs of cardiac injury. For this reason one must exercise caution in an evaluation of the effects of a blow to the sternum even though the external trauma may appear to be minimal. It has been our practice to routinely obtain an electrocardiograph on admission of all non-penetrating wounds of the chest and repeat the study if any signs or symptoms suggestive of cardiac contusion appear. We have not seen rupture of the heart valve, although this has been reported.

We have taken as evidence for injury to the myocardium the following criteria:

1. Progressive electrocardiographic changes.
2. Cardiac enlargement not due to pre-existing disease or hypertension.
3. Abnormal rhythm not including premature beats.
4. Pericardial friction rub or tamponade.

These are essentially the criteria as reported by Gore,⁹ who also adds several other criteria which we have not so far seen in our small series.

Abnormal rhythm is not uncommonly seen. Osborn¹⁰ suggests this is due to contusion of the right auricle at the entrance of the inferior vena cava near the site of the sinus and atrioventricular nodes.

Treatment must be directed towards providing the myocardium with an adequate supply of oxygen and reducing the work load by avoidance of exertion. The patient is placed on a coronary regimen and measures to counteract chest wall instability and atelectasis instituted. Digitalis and quinidine may be necessary. Cardiac tamponade may occur due to traumatic hemopericardium. This usually can be corrected by pericardial aspiration. (see Fig. 4)

Summary

Injuries to the intrathoracic viscera from non-penetrating wounds of the chest are somewhat uncommon; however, when they do occur recognition and treatment must be prompt if the patient

is to survive. The commonest injury is a simple tear of the parenchyma with a traumatic pneumothorax. Diagnosis and treatment of this condition is discussed. Occasionally a larger bronchus will be involved and here thoracotomy is indicated urgently. A rupture of the left hemidiaphragm is a serious injury which at times is difficult to

trauma to the heart occurs occasionally and may result in abnormalities of rhythm, progressive electrocardiographic changes and cardiac enlargement. Pericardial changes are occasionally seen with development of tamponade. These patients should be placed on a coronary type of regimen with bed rest. The heart must be supplied with

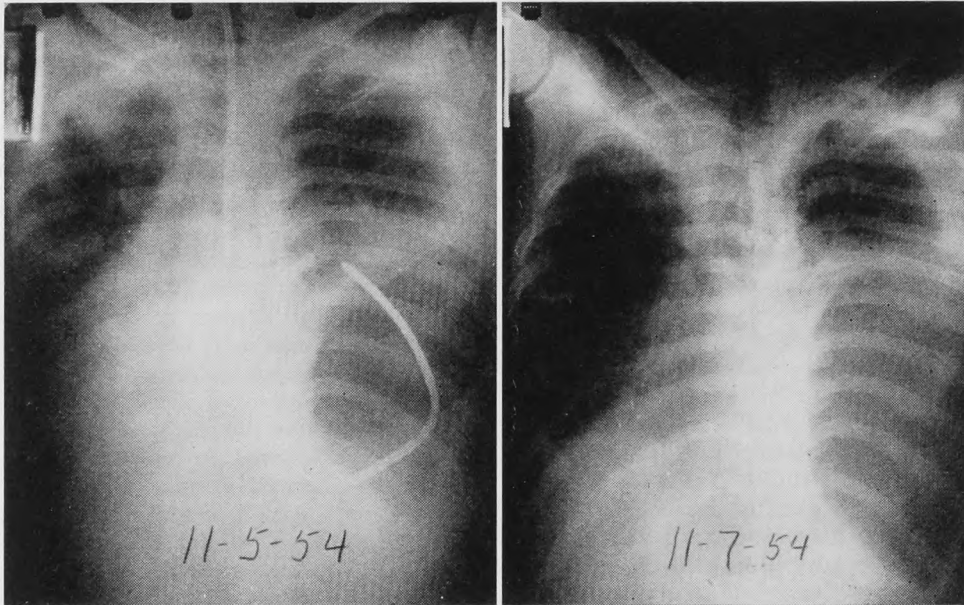


Figure 3

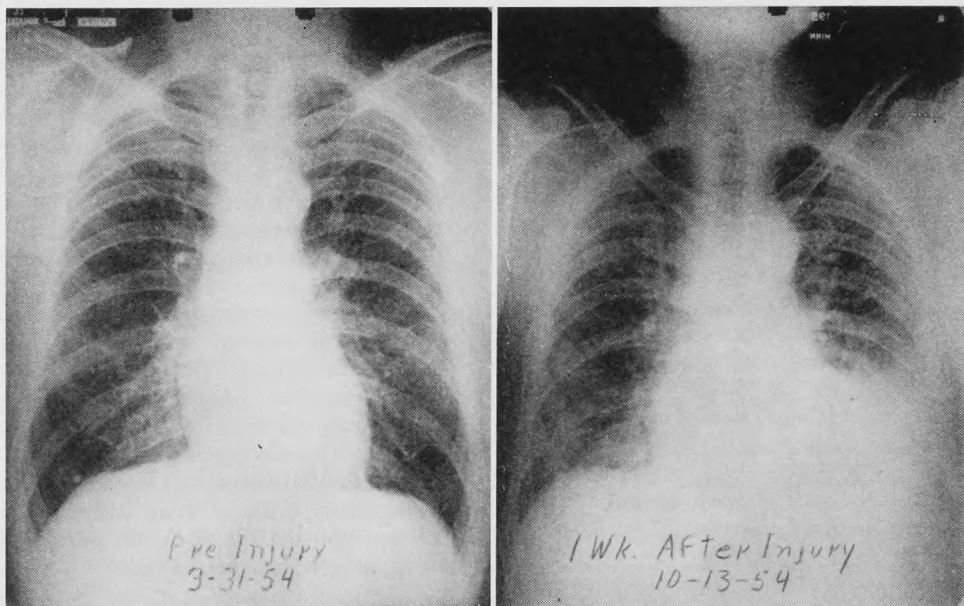


Figure 4

diagnose. The presence of a rupture of the diaphragm should be considered in injuries involving the lower left chest. The various clinical and x-ray pictures are described. The treatment is repair of the ruptured diaphragm with return of the abdominal viscera to the abdomen. Significant

oxygen. The abnormalities of rhythm may require quinidine and/or digitalis and pericardial tamponade can usually be handled by aspiration.

Case Report

(L. R.) Patient, age 46, admitted to Deaconess Hospital on October 13, 1954, following a crushing

injury of the chest on October 10th. His condition on admission was excellent except for slight increase in the pulse rate. X-rays suggested some enlargement of the heart shadow with atelectasis in the left lung field. A previous chest plate taken in March of 1954, was available for comparison. This showed the heart shadow to be within normal limits. His condition deteriorated on October 14, 1954. His pulse became very weak and irregular. The rate was 140 and he developed marked dyspnea. He was digitalized at that time. The patient was seen in consultation by the author on October 20th at which time he was cyanotic, his blood pressure was 90 systolic and the pulse was extremely weak and fast. On October 21, 1954, the electrocardiograph is described as showing a rate of 167 with supraventricular tachycardia with T wave changes. The cardiologist felt that the patient showed evidence of myocardial damage. Treatment consisted of strict bed rest. Attempts were made to correct the bilateral atelectasis by frequent tracheal suction. The patient's cyanosis disappeared and the pulse rate decreased; however, he continued to remain somewhat dyspneic. An electrocardiograph on October 23rd showed a rate of 125. The T waves were negative in all leads. There was evidence of auricular flutter with a shifting atrioventricular block. On October 26th the patient was started on quinidine and the digitalis continued. Because of the x-ray evidence of enlargement of the pericardium a needle was inserted into the pericardial sac but no excessive fluid or blood was found. On November 1st a moderate amount of fluid was removed from the left pleural space. The electrocardiograph on 10-28-54 revealed a ventricular rate of 150 with an atrial rate of 300. There were ST and T wave changes. The patient slowly improved and he was allowed up in a chair for ten minutes on November 10th and left the hospital on November 19th. Follow-up chest film on 11-16-54 revealed a cardiac shadow which is within the limits of normal.

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Abstract

Cytological Prognosis in Cancer of the Uterine Cervix Treated Radiologically: Ruth M. Graham, B.S. and John B. Graham, M.D., Cancer. Vol. 8, No. I, Jan. - Feb. 1955.

The authors report their efforts to prognosticate which patients with cervix cancer will respond to radiation. All concerned with these problems know that two patients with similar stages of cervix cancer, and similar radiation therapy, may respond very differently. Only after many months have we been able to determine which patient has had a good radiation response.

The authors have observed characteristic cellular changes in the non-malignant epithelial cell from the vaginal smear obtained early in the course of radiation therapy. These changes in the benign squamous epithelial cells are vacuolization of the cytoplasm, nuclear changes, increase in nuclear size and cell size, and the presence of multiple nuclei. If more than 75 per cent of the benign epithelial cells show any of these changes the case is considered a good response from the prognostic viewpoint. If less than 60 per cent of the cells exhibit changes, the case is classified as a poor response. One hundred and forty-two cases of cervix cancer treated by radiation and divided into poor and good response groups were studied. The five year survival in the good response group was 65 per cent, in contrast to 8 per cent in the poor response group.

The authors discuss the implications of this prognostic examination. If the radiation response of a patient can be improved as measured by a favorable change in the vaginal smear showing an improved cytological response, then the hope is that the cure rate can be likewise improved. Indeed, the authors have 46 recent cases in which the cytological response was poor and by administration of Testosterone or Alpha tocopherol, the cytological response to radiation was changed to good. We shall look with interest to the long term results in these 46 cases.

R. L. Cooke.

Cancer of the Neck

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This is a large subject, — it cannot be covered in 20 minutes. I shall, therefore, refer only briefly to primary neoplasms of salivary gland, thyroid, pharynx, larynx, and cervical oesophagus, and concentrate instead on the more common problem of secondary tumours in the neck. Of the latter only those which derive from cancers in the head and neck area are of interest from the standpoint of treatment. The management of these metastases is in itself a complex matter. Perhaps it may be simplified if I confine my remarks to a few general principles which have been helpful to me.

It is, indeed, fortunate that, with the exception of thyroid neoplasms, almost all the head and neck cancers, — lip, tongue, oral cavity, tonsil, pharynx, larynx, parotid, etc., — generally confine their initial metastases to lymph nodes in the neck. Thus both primary and secondary tumours are for the most part "accessible", for early diagnosis, for surgical excision, for the application of radiation therapy, and for direct observation of the effects of treatment. On theoretical grounds it should be possible to obtain a high rate of cure. That we fail to do so should spur us on to seek earlier diagnoses and improved methods of treatment.

Before dealing with the management of cervical metastases, it is necessary to say a few words about the treatment of the primary tumours.

For malignant growths of thyroid or salivary glands surgical excision is accepted as the method of choice. In regard to carcinomas of larynx, hypopharynx, and cervical oesophagus, there is some difference of opinion, but I believe the balance of evidence at present favors surgical therapy. I think, however, that we must keep an open mind in regard to the possibilities of improved results from the use of more modern methods of radiation such as the cobalt bomb.

Tumours of naso-pharynx and oro-pharynx are seldom amenable to surgical removal and so must be treated by radiotherapy.

In relation to malignant lesions of lip and oral cavity there are widespread differences of opinion revolving about the question of surgery versus radiation. Yet it is remarkable that these differences of opinion do not seem to lead to significant differences in results (Table 1). When allowance is made for variation in selection of cases, in age and sex distribution, and in method of computing statistics, — there seems to be a remarkable uniformity of results at all good clinics. Surely this indicates that the probable limiting factor is the biological nature of the disease itself and that, within this limit, either surgery or radiation, or various combinations of the two, may, when ex-

Table I
Oral Cancer
Gross 5-Year Survival

	Lip	Tongue	Other Oral
Toronto	58.4%	33.6%	31.8%
(Wookey) (1)			
London, Eng.	46%	17%	19.5%
(Ledlie) (2)			
Baltimore	61.6%		
(Newell) (3)			
Manchester		26%*	32%*
(Russell) (4)			
New York		20%	
(Morrow) (5)			
Paris		18%	
(Roux-Berger) (6)			
London		22.3%	
(Cade) (7)			

*10-year survivals.

pertly applied, yield comparable results. In my opinion the important thing is to have both forms of therapy available, each possessing the highest degree of technical competence, and working together in a spirit of friendly cooperation based on mutual acceptance of sound fundamental principles. In such an atmosphere most differences of opinion can be readily resolved, and, what is more important, the treatment of each case can be individualized, account being taken of the location and stage of the lesion, its rate of growth, its histological nature, and the age, occupation, and general condition of the patient.

At the Toronto General Hospital we consider radiation therapy for oral cancer to be about as effective as surgical excision, and, since it is generally less deforming and less disabling, it is accepted as the method of choice for the initial treatment. However we believe that it is entirely justifiable for surgeons to recommend excision of those tumours which are so small, superficial, and mobile, that their wide removal will not result in significant cosmetic or functional disability. We believe, moreover, that, where feasible, operation should be advised in all cases in which the tumour is invading bone (mandible or maxilla), since radiation in these cases is unlikely to be successful. Finally surgical excision should when possible be employed if residual or recurrent tumour is seen following an adequate course of radiation therapy. As a general rule unsuccessful radiation therapy should not be repeated unless the dosage has been clearly insufficient, or unless the case is considered unsuitable for treatment by any other method. Excessive radiation is bad treatment, — it causes painful chronic ulceration, necrosis of bone, and loss of teeth. Radiotherapists responsible for such bad results are just as culpable as surgeons who perform huge deforming operations on patients whose tumours could in all probability be dealt with successfully by either radiation or local excision.

What general principles can guide us in dealing with the spread of head and neck cancers to cervical lymph nodes?

It is generally accepted that for this purpose surgical removal is superior to radiation therapy,

providing that by surgical removal we mean excision en bloc of all lymph nodes and channels in the area of the neck through which the neoplasm is most likely to be disseminated. Local removal of involved nodes should not be carried out, — it is unlikely to be successful because other nodes not palpably enlarged may be already involved, and because manipulation of the excised node may cause dissemination or implantation of the neoplasm. And, of course, there is no point in performing biopsy of an enlarged cervical node when the primary tumour has already been demonstrated, — such a procedure does not help the treatment of the "primary", but it certainly prejudices the handling of the "secondaries".

There are certain circumstances in which surgical therapy is inadvisable and, hence, palliative radiation should be prescribed. Absolute contraindications to neck dissection are inability to control the primary lesion, presence of distant metastases, refusal of the patient to accept operation. Operation is occasionally interdicted by the patient's old age or poor general condition. Nodes which are firmly fixed should generally be considered inoperable, with the exception that metastases attached to the mandible may on occasion be successfully dealt with by stripping off the peritoneum along with the adjacent nodule, or by excising a segment of the bone. Metastases which seem hopelessly fixed sometimes become operable following radiation treatment. Ulceration does not necessarily prohibit surgery since wide areas of skin can readily be sacrificed. It is usually wise to advise against operation when involved nodes are widespread throughout the neck area, or are growing rapidly, or if the primary tumour is "anaplastic" or "lympho-epithelioma", — evidences of an unfavorable biological nature. In these cases metastases will usually respond quickly to radiation, — surgical treatment should be considered only if nodes recur while the primary growth remains controlled.

With these exceptions we consider that block dissection of the neck is the treatment of choice for involved lymph nodes. The only problem is that of timing in relation to the treatment of the primary lesion.

When cervical metastases are detected at the initial examination of a patient with cancer in the head and neck area, immediate dissection of the neck should be done only if it is decided to treat the primary growth also by simultaneous operation. Whether the two procedures are done "in continuity", as is conveniently accomplished with carcinoma of the lower gingiva, floor of mouth, side of tongue, hypopharynx, thyroid, or parotid, — or, separately, as with tumours of lip, buccal mucosa, or palate, does not appear to matter particularly, so long as an adequate excision of

both primary and metastases can be accomplished. Lymphatic spread from these tumours is apparently embolic rather than by permeation, — in any case recurrence in the tissues separating an area of block dissection from a controlled primary tumour is quite uncommon.

If the primary malignancy is to be treated by radiation, operation on the neck should generally be postponed until after its completion. Providing the nodes are small and mobile they may safely be kept under observation during this interval. If they are already large or are showing evidence of early fixation, the radiation therapist should be requested to include them in one or more of his "beams" so that temporary restraint of growth may be imposed upon them. If, subsequently, the "primary" responds well, operation on the neck should be advised. If the "primary" appears unlikely to be controlled, plans should be made to excise it and dissect the neck at one operation.

When at the time of discovery of the primary tumour, no significant nodules can be felt in the neck, a decision must be made as to the advisability of "prophylactic" treatment of the field of lymphatic spread. This really means treatment based on the twin assumptions, (a) that metastatic spread to cervical nodes has already occurred but is not yet clinically detectable, and, (b) that the primary tumour is either controlled or is capable of being successfully dealt with in the near future.

The use of radiation of the neck for prophylaxis has been generally discredited, — it is not technically possible to expose such a large area to the required "tumour lethal dose". Smaller dosage is ineffective in regards to malignant cells, but inconveniently damaging towards other tissues.

If the primary growth is to be excised by a procedure which can be conveniently extended to include neck dissection, then the combined operation should usually be carried out even in the absence of palpable secondaries. This applies to malignant tumours of the floor of mouth, side of tongue, gingiva, and adjacent buccal mucosa. For parotid tumours prophylactic neck dissection should not be done unless the diagnosis of "malignancy" is clearly established by unequivocal "frozen-section" report, and then only if the "primary" is eradicated with certainty. In relation to thyroid carcinomas I believe that prophylactic neck dissection is rarely indicated. In our experience the survival of patients with thyroid neoplasms seldom depends upon control of cervical spread. Local recurrence of the "primary" and, or, distant metastases are most commonly the lethal factors, — neck dissection is unlikely to prevent these unfortunate complications.

In circumstances other than those described above I believe that prophylactic neck dissection should but seldom be employed. Of patients with oral cancer who are free from metastases at the

time of treatment to the primary only a minority subsequently develop them (Table II) — hence, the

Table II

Oral Cancer

Incidence of Cervical Metastases

Toronto General Hospital, 1929-1945

	On Admission	Later Development	Total
Lip (1128 cases)	50 (4.4%)	99 (8.6%)	149 (13%)
Tongue (342 cases)	123 (35.9%)	80 (23.5%)	203 (59.4%)
Other Oral (497 cases)	130 (26.1%)	90 (18.1%)	220 (44.2%)

routine employment of prophylactic dissection will mean that a considerable number of unnecessary operations are performed. Moreover, in about one third of patients theoretically eligible for the prophylactic procedure, there will be subsequent recurrence of the primary cancer, which may nullify the value of the neck dissection. I do not believe that bilateral prophylactic neck dissection is ever justified, so the procedure is automatically eliminated in the case of primary tumours which approach or transgress the midline.

At the Toronto General Hospital Oral Cancer Clinic we prefer to keep patients under observation after treatment of their primary lesion, at first every few months, later at longer intervals. Neck dissection is carried out only when lumps are detected. However, we do not quarrel with those who advocate routine prophylactic neck dissection for patients with well lateralized biologically favourable oral cancers other than those of lip, — we just do not like performing a lot of unnecessary operations for very questionable benefit.

A final problem is presented by that small group of cases in which cervical metastases are the first and only manifestation of malignant disease, the primary tumour remaining "hidden" during the initial period of examination and treatment. In these cases a biopsy is necessary to establish the diagnosis. Excisional or incisional biopsy under local anaesthesia is permissible in patients with apparently unfavourable types of disease, — nodules which are multiple, rapidly growing, fixed, matted, etc. Many of these will prove to be primary lymphoid tumours, others may be shown on histological examination to have spread from distant organs such as lung, stomach, pancreas, kidney, etc. Palliative radiation to the neck will usually be prescribed.

In more hopeful situations, when only one or two small mobile nodules are detected, the patient should be given general anaesthetic and a biopsy taken for examination by "frozen" section. If the tissue examined is carcinoma of a type which may derive from a primary growth in the head and neck area, block dissection should be done at once. In our series of 70 "hidden primary" cases of this favourable type 45 have died and 6 are still living without the "primary" becoming clinically apparent, — it seems, therefore, justifiable to treat the

metastases vigorously as a palliative measure. Of 28 cases in which the primary tumour was found, (19 during life, 9 at autopsy), 17 were in the head and neck, 10 in lung, and one in breast. The prognosis in these "hidden primary" cases is generally poor, — of our 70 cases only 5 lived more than 5 years: 3 others are still living for shorter periods.

I should like to say just a few words about the extent and technique of neck dissection.

Full radical block dissection involving clearance of the submental triangle as well as the whole of the anterior and posterior triangles should be the standard operation. The lesser procedure of "upper neck dissection", i.e. dissection upwards from the bifurcation of the carotid vessels to include the submental and submandibular triangles, should be reserved for old or poor risk patients whose metastases are limited to this area. Bilateral upper neck dissection is however often advised for patients with primary lip tumours near the midline.

Dissection of the second side of the neck is justified when the primary tumour has remained controlled and there has been no recurrence in the previously operated side. Such operations are well tolerated, and the remaining jugular vein can be sacrificed with impunity. Simultaneous bilateral neck dissection is seldom indicated. I feel it should be done only when there are bilateral metastases, and then only if the "primary" is controlled with certainty, and the metastases are small, mobile, and slowly growing. This operation is quite feasible although rather tedious. We have always preserved one jugular vein by dissecting cleanly along its adventitia from skull to clavicle.

Individual differences in technique of neck dissection seem to have little effect on end results. Our own operation has been improved in recent years by learning to identify and spare the mandibular branch of the facial nerve according to the method advocated by Hayes Martin⁸, and also, in a few suitable cases, by dissecting out the accessory nerve so as to preserve normal shoulder function. One minor detail which seems to be of value is the use of suction drainage in these wounds, accomplished by the introduction of two split rubber catheters through stab wounds in the lower neck. Through a Y-tube these catheters receive gentle continuous suction from a small electric pump. In most cases treated this way the skin flaps get "stuck down" quickly, and we believe the patients are more comfortable than with bulky dressings.

I do not believe it is practical to discuss the results of neck dissection for metastatic tumour except in so far as they are reflected in the survival figures for the various primary lesions. A summary of these figures for cases of lip and oral cancer treated at the Toronto General Hospital is set forth in Table III. Most of the cases represented here have been treated by Dr. Harold

Table III
Lip and Oral Cancer
Five-Year Survival Rates
Toronto General Hospital, 1929-1945

	Number	% Net Survival	% Gross Survival
Lip	1128	85.1	58.4
Tongue	342	40.1	33.6
Other Oral	497	37.6	31.8

Net survival excludes untraced cases and those dying of extraneous disease.

Wookey, Surgeon, and by the late Dr. Gordon Richards, Radiotherapist, who together instituted in Toronto the treatment of head and neck cancer by a combination of radiation and surgery. As far as I am aware, their results have not yet been surpassed; in them I find justification for the policy of treatment which has here been recommended.

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Case Report

Cancer of the Pancreas, Mimicking Duodenal Diverticulitis

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and

Y. N. Joubert, M.D.

Pain with postural relief is a feature of several gastro-intestinal lesions; amongst them are duodenal diverticulitis and cancer of the pancreas. We describe the following case because the criteria laid down by Bockus for a diagnosis of duodenal diverticulitis were fulfilled; nevertheless the cause of the man's illness was a pancreatic carcinoma.

Case Report

A 71 year old man was admitted to St. Boniface Hospital complaining of central abdominal pain relieved by lying supine. A vigorous and active man, he still went on hunting trips but often had to lie on the ground to obtain easement of his abdominal discomfort, there being no other effective remedy.

He had been healthy until four years ago, when he suffered a bout of dyspepsia with attacks of post-prandial pain. Investigations at that time including X-ray studies had been negative; and the illness had cleared up after a month.

Four months before admission, he began to notice a steady dull pain in the epigastrium, which was deeply situated and was sometimes referred to the back, especially on standing. The pain came on about half an hour after meals and was associated with a feeling of fullness and bloating. It lasted for from one to two hours unless he lay down, and the taking of food or of alkalis did

not help it. He thought that fatty foods were especially apt to upset him. He had lost 15 lbs. in weight since the onset and during the last 12 months had also developed a troublesome constipation. The loss of weight and the constipation had not been present during his attack of indigestion in 1950. He had no nausea, vomiting or melaena.

After coming into hospital he was confined to bed and the pain disappeared. On examination an ill defined mass was felt in the epigastrium just to the right of the middle line, with some tenderness over it. His haemoglobin was 12 grams per cent and the blood findings and the sedimentation rate were otherwise normal. Repeated tests for occult blood in the stools were negative.

Barium meal examination revealed a large diverticulum extending medially from the upper portion of the second part of the duodenum. It was tender on palpation, and showed retention and deformity at the four hour film (Plate 1); a mucosal pattern within it had been seen on earlier films. The small bowel exhibited marked hypermotility, in curious contrast to the obstinate constipation present, but well in keeping with the theory that intestinal sacs, including that man-made pouch, the afferent loop of the Billroth 11 gastrectomy, in trying to empty themselves communicate their struggles to the remainder of the small gut, which bestirs itself in a frenzied sympathy. A second study confirmed the presence of tenderness over the diverticulum, and the persistence of the small bowel hurry, but in spite of this increased peristalsis, stool fat studies did not reveal a steatorrhea.

The clear and definite history of epigastric pain coming on after food and relieved only by lying

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supine, together with the X-ray demonstration of tenderness of the diverticulum and retention of barium within it pointed to a diagnosis of diverticulitis. This diagnosis was accepted provisionally, not without misgiving. One of us (AJG) in 20 years has never seen a proven case of duodenal diverticulitis. The man's weight loss had yet to be explained. On two occasions the serum amylase level was found to be raised to 360 and to 400 somogyi units (normal 60-160 units). The cholecystogram was unsatisfactory, in that the gall bladder filled with dye but did not empty well, and the radiologists asked for a repeat study, but a decision for laparotomy was undertaken.

At operation a carcinoma of the pancreas was found, involving the distal two parts of the duodenum, more especially the fourth part where the tumour had perforated the parietal peritoneum at the duodenal jejunal junction. There was a large mass three inches thick extending from the tumour into the root of the mesentery and downwards into the brim of the pelvis. The liver was full of metastases. As nothing could be done the abdomen was closed after tissue had been removed for biopsy. The pathologist reported that extensive infiltration with anaplastic tumour cells arranged in glandular formation were present in the specimen, compatible with a primary tumour arising in the pancreas.

Discussion

Duodenal diverticula are often found during the course of a barium meal study especially in people over the age of 50 years; they are not usually the cause of symptoms. Some physicians doubt the existence of duodenal diverticulitis as a clinical entity.

According to Bockus,¹ the failure of a diverticulum to empty predisposes towards the development of diverticulitis, and this should be suspected if tenderness can be elicited over the pouch, and if the barium examination shows retention. The occurrence of and relief from pain in the cases described by Bockus were related to changes in posture which presumably affected the ability of the diverticulum to empty itself.

Cancer of the pancreas is coming to be recognized as a disease characterized by pain and weight loss rather than by painless jaundice, which is seen in a minority of cases. Pancreatic malignancy may offer frustrating difficulties in diagnosis and recently several clinical studies of the symptomatology have been undertaken especially as regards the pain. Most authorities agree that the pain is often related to posture, and that when it is, it is aggravated by the supine position and relieved by flexing the trunk or standing; the reason for this probably lies in the varying tensions put upon the capsule of the pancreas by changes in bodily position.^{2, 4, 5}

In our case the pain was relieved and not made worse by lying supine; and doubtless the heavy downward extension of the growth was responsible for this unusual state of affairs.

Pancreatic lesions may cause motility disturbances of the small bowel,³ by involvement of nerve plexuses and the bowel wall; the hypermotility of the gut observed in this man was more likely due to the pancreatic carcinoma than to the diverticulum. On the other hand, hyperperistalsis favours the development of diverticula; we believe that their presence cannot be entirely ignored; as they may indicate the existence of a serious lesion in the vicinity.

Summary

A case of pancreatic cancer mimicking duodenal diverticulitis is described. Unlike the other published cases the pain of this cancer was relieved by recumbency.

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Abstract

The Development of Cancer in Chronic Ulcerative Colitis. J. A. Bargen, W. G. Sauer, W. P. Sloan, R. P. Gage; *Gastroenterology*, 26: 32-37, 1954 (Jan.).

Ninety-eight patients developed carcinoma of the rectum or colon and then died, in a series of 1,564 patients with chronic ulcerative colitis. Information as to the diagnosis was obtained from direct observation at the Mayo Clinic, from letters from physicians, and from letters from relatives. To compare the number of deaths with the expected number of cancer deaths in a normal population, the number of expected deaths for total expected malignant neoplasms, and for malignant neoplasms of the digestive organs and peritoneum were calculated. Only 27 deaths were expected from all types of cancer, and 9 deaths from the more specific classification. These calculations were made for the age groups divided in 5-year periods. The ratio of observed to expected deaths due to carcinoma of the colon and rectum was 20 or 30 to 1. On the average, the death rate from cancer of the rectum or colon among persons with ulcerative colitis is about 30 times as frequent as that in the general population of the same age and sex. The annual death rate from cancer of the colon or rectum among patients with ulcerative colitis is estimated to be between 1 and 2 per hundred.

Consideration of this, and the 25 year survival rate for ulcerative colitis patients, does not indicate early removal of the colon.

A. G. Rogers.

Paediatrics

Problems in the Management of Juvenile Diabetes*

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The first problem in the management of juvenile diabetes is its recognition. This is self evident, but the fact remains that too often treatment is delayed because the disorder is not considered, or on the other hand, is instituted before the diagnosis has been confirmed.

Diabetes in children usually has a moderately acute onset. The history is usually typical with thirst, polyuria, occasionally enuresis, loss of weight and fatigue. If the case has progressed further, to a state of acidosis, abdominal cramps, cramps in the legs, nausea and vomiting may be followed rapidly by drowsiness and coma.

In the face of such a history, a urinalysis is mandatory. However, the finding of glucosuria and ketonuria in such patients, while strongly suggestive, is not conclusive evidence that one is dealing with diabetes, since other conditions such as a lowered renal threshold, galactosemia or glycogen storage disease may occasionally present such a picture.

In association with the above symptoms and signs, a random blood sugar over 200 mgms.% is diagnostic. If below this, it is best to try and obtain a blood sugar two hours after a meal. If this is over 200 mgms.%, the diagnosis is established.

It should be emphasized here that a fasting blood sugar test is the least valuable of all tests in making a diagnosis of diabetes, for in early or mild cases the fasting level may be quite normal. While speaking of blood sugars, I should like to digress a moment to say that for children, it is imperative to have a micro method available. I am sure that even adults would much prefer a drop of blood be drawn from a finger prick rather than submit to a vena puncture.

The methods now available for micro work are simple, accurate and reliable for most of the common chemical tests performed on blood.

Once having established the diagnosis of diabetes the second problem in its management is the one of treatment.

Treatment can be considered under three main headings:

1. Diet
2. Insulin
3. Exercise

Diet

Before the discovery of insulin, dietary management was little short of slow starvation. It was natural that following the introduction of insulin the practice of gross diet restriction was maintained. This practice resulted in stunted undernourished children lacking in energy and normal enjoyment of life. It is now generally agreed that the diabetic requires the same caloric intake as a normal child. The composition of his diet, likewise, should resemble that of a normal child which is relatively high in carbohydrates, (the fuel of energy) and adequate in protein, (the building blocks of growth).

The following are a list of diets employed at the Hospital for Sick Children, Toronto:

Age	Carbohydrate	Fat	Protein	Calories
3-6 years	140	70	60	1430
7-8 years	160	80	70	1640
9-10 years	180	90	80	1850
11-12 years	210	100	90	2100
13-14 years	240	105	100	2450

Diets are prescribed according to age. In the event that the child is much larger and more active than the average for his age, he is given the diet for the next higher age group. Conversely, some little children may require a diet in the group below.

Fortunately, the American Diabetes Association have developed a relatively simple method of grouping foods. These groupings are known as exchanges. The chief groups are Milk, Vegetables, Fruit, Bread, Meat and Fat. Any articles listed in a group may be exchanged for another article of food in the same list. Meal plans are available for each dietary prescription. Thus, for a diet for a 9 year old, of 1800 calories:

C 180: F 90: P 80: Calories 1800:

Amount	Kind of Food	Choose From
1 pint	Milk	List 1
Any Amount	Vegetable Exchanges A	List 2A
1	Vegetable Exchanges B	List 2B
3	Fruit Exchanges	List 3
8	Bread Exchanges	List 4
7	Meat Exchanges	List 5
5	Fat Exchanges	List 6

For best results it is wise to weigh or measure the diet at least in the early years, until the parent and the child have a true appreciation of the portions allowed. As knowledge increases, it is certainly possible for the diabetic to choose a meal accurately at a restaurant, or when invited out to a friend's home, without the necessity to weigh or measure it, except by eye.

Much has been said about the free diet. Although we do not subscribe to it, a few of our clinic patients obviously make little, or no attempt, to follow dietary regimen. These children are constantly in and out of hospital with acidosis, infection, or severe insulin reactions. Those who make some attempt to follow a dietary plan, rarely, if ever, are admitted for such causes. Most patients

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do not find the adherence to a dietary plan too difficult or irksome.

Furthermore, there is growing evidence that late complications of juvenile diabetes, the nephritides, retinitis and arteriosclerosis, are much fewer and less severe in the controlled than in the uncontrolled diabetic.

During an illness which is not too severe but enough to cause the child to remain in bed, a diet is prescribed which is just $\frac{2}{3}$ of the usual diet. If the illness is severe, the diet prescribed is a liquid diet, chiefly of milk, fruit juice and 10% carbohydrate drinks, such as ginger ale. No special meal times are observed in this case and fluids are given continuously as necessary, but are limited in caloric value to $\frac{2}{3}$ of the normal dietary intake.

During periods of increased activity such as occurs at summer camp, it may be necessary to increase the diet by 200-400 calories. This is simply done by employing the diet for the next higher age group.

Special activities such as playing hockey, swimming or hiking also call for extra energy and hence extra calories. If indulged in regularly these are best accommodated by a general increase in diet.

If only occasionally, then an extra 20 or 40 grams of carbohydrate (1 to 2 bread exchanges) should be taken at the conclusion of the exercise.

Insulin

Prior to the discovery of insulin, all children who developed diabetes died within a few months or a year. Such evidence is sufficient proof that all children require insulin for survival. Mention has already been made of the fact that diets must be adequate for growth and activity. Thus, a full diet is first prescribed and then sufficient insulin is employed to maintain a normal glycaemic response.

Over the years at The Hospital for Sick Children, Toronto, the most acceptable plan of insulin administration has been to give both Regular (Unmodified) insulin and Protamine Zinc Insulin in separate injections one-half hour before breakfast. In the majority of cases, approximately $\frac{1}{3}$ is given as Regular Insulin and $\frac{2}{3}$ as Protamine Zinc Insulin. Children under five years of age require roughly equal amounts of the two insulins.

Neither NPH or Globin Insulins have been found satisfactory. The chief reason for introducing such insulins was to reduce the number of injections from two to one. However, in all but the very mild cases, neither of these insulins have a sufficiently long action to prevent nocturnal hyperglycaemia. Although they are effectively used by some clinics, most cases require $\frac{2}{3}$ of the daily dose before breakfast and $\frac{1}{3}$ before supper. Not only two needles are needed, but they have to be administered at different times in the day.

Recently the Lente type insulins introduced by Hallas Mueller of Denmark have been tried. Mueller showed that if zinc insulin crystals were suspended in an acetate instead of a phosphate buffer, the time of action was similar to that of Protamine Zinc Insulin, although no Protamine or similar protein like product was present. He termed this insulin Ultra Lente. If, instead of a crystalline, he made an amorphous suspension of zinc insulin in acetate buffer, the time of action was very similar to that of Regular (Toronto) Insulin, this he called Semi-Lente Insulin.

A mixture of 70% ultra lente and 30% semi lente insulin is known simply as Lente Insulin. It will be seen from this combination that it resembles the $\frac{1}{3}$ Regular— $\frac{2}{3}$ Protamine Zinc Insulin, that we have been using previously. It has the advantage that one can give it as a single injection. Furthermore, in an individual case, if more quick acting effect is desired some semi lente insulin may be added. If a more prolonged effect is required, ultra lente may be added.

These insulins are not yet available commercially in Canada. In the U.S.A. only the Lente type of insulin is available.

There is a further point of interest in respect to these insulins. Recent experimental work has shown that heparin prevents experimentally induced nephritis in animals. Protamine is known to neutralize the effects of heparin. Finally, renal complications are very common in diabetes. One wonders if there is any connection between them and the protamine in PZI.

During an illness, insulin administration is never omitted even if the patient is unable to take food by mouth. Indeed in most instances, the insulin requirement is increased.

During an illness, parents are instructed to test the urine before each meal and at bedtime. If there is considerable glycosuria they are instructed to give 5 or 10 units of Regular Insulin for a three or four plus reaction at each of these times, in addition to the regular daily dose.

For their normal daily routine, patients are taught to test their fasting urine specimen and their mid day urine specimen. If the fasting specimen shows sugar consistently, for a period of 3 or 4 days, they are instructed to increase their Protamine Zinc Insulin. If their mid day specimen shows sugar over a period of three to four days, the Regular (Toronto) Insulin is increased. Conversely, if reactions occur at these times, patients are instructed to reduce the appropriate insulin by 10%.

Exercise

Exercise plays a large part in the management of juvenile diabetes. During exercise, carbohydrate is utilized more efficiently with respect to insulin requirements. Since exercise is beneficial

for growing children, an average amount of exercise is desirable.

The chief difficulty arises in that children's activity is so variable. As a consequence, when sedentary they spill sugar and when overactive, they may suffer from insulin reactions.

For those who go to camp, or who take part in sports, an increase in diet as previously recommended provides the necessary added calories for the extra energy expended and at the same time prevents insulin reactions.

Complications

Insulin reactions are feared by diabetic children and their parents and it is important, therefore, to avoid them if possible. But this does not mean that one should condone a constant glycosuria in order to prevent them. Many children can remain free of reactions and free of glycosuria. A few of the more labile ones, if kept constantly clear, may have frequent and severe reactions. Such children may be allowed to show a trace to a one plus sugar during part of the day. Children should be instructed regarding the signs and symptoms of reactions and the necessity for taking sugar to prevent or abort them.

Parents should know the use of adrenaline which may be given in $\frac{1}{4}$ - $\frac{1}{2}$ cc. amounts to raise the blood sugar in the case of a severe reaction. This should be followed by the administration of carbohydrate by mouth. Rarely, the physician may be called upon to inject 25 - 50 ccs. of 50% glucose intravenously.

Two common complications of insulin administration in children are 1. Fat Atrophy, 2. Fibrous Placques.

Fat atrophy may occur at the sites of insulin injection. Its cause is not known. Usually avoiding the area of atrophy for a period of months or years, will lead to the return of fat to the area.

The fibrous plaques are caused by injecting the insulin in too small an area. This area becomes hard and fibrotic and relatively insensitive, hence children prefer to have insulin given in these areas. However, absorption is irregular and inadequate and frequently these plaques are the cause for a mounting insulin dose with signs of poor control.

The most serious complication of diabetes is acidosis and coma. Fortunately, this is seen much less commonly than formerly and is mostly seen in new and unrecognized cases or cases of indifference or neglect.

The treatment of coma is best done in hospital where there are adequate laboratory facilities. However, it may be accomplished without these aids, if necessary.

The diagnosis having been made, insulin should be given according to the following schedule:

Infants 5 units q.2.h. given subcutaneously
1 - 5 years 10 to 15 units

5 - 10 years 15 to 25 units

10 - 15 years 20 to 30 units

If the patient is deeply unconscious, they should be given an equal amount intravenously.

The degree of acidosis is of more consequence than the height of the blood sugar. In the milder cases of acidosis there may be occasional ketones in the urine, but none demonstrable by simple means in the blood. This is explained by the fact that the urine ketones are concentrated several times due to tubular reabsorption of water.

In the more severe cases of acidosis, not only is there a ketonuria but there is also a ketonaemia. This can be roughly measured by a simple test, suggested by Dr. Duncan of Philadelphia. Blood is drawn and allowed to clot, or if a centrifuge is present the cells may be spun down. The serum or plasma is then diluted 50%, 25%, 12.5% — a drop of plasma and one of each of these dilutions is then placed on a separate acid test tablet. If all dilutions show a positive acetone test, the patient is gravely ill and in severe acidosis. The 12.5% dilution never shows a 4 plus reaction.

Dr. Duncan gives adults 100 units insulin for each dilution which shows 4 plus acetone. In children, I would suggest a dosage according to age as suggested above, e.g. a 10 year old showing 4 plus acetone in three dilutions would receive $3 \times 25 = 75$ units. Half to be given intravenously.

If only the straight plasma, but none of the dilutions show ketones, the acidosis is moderate and may be controlled with subcutaneous insulin. Repeat the test every two hours until the ketonaemia has been cleared. A check on the sugar excretion should also be made by urinalysis from indwelling catheter.

In this regard, it is necessary to emphasize the necessity of emptying the bladder after each test by manual pressure on the bladder, if necessary.

After insulin the most important therapy in acidosis is fluid administration. The type of fluid administered is of some importance.

It will be remembered that blood normally contains approximately 150 meq/l of sodium but only 100 meq/l of chloride. The remainder of the anions being made up chiefly of CO_2 . Isotonic chloride solution, however, has 150 meq/l of sodium and 150 meq/l of Chloride. If isotonic sodium chloride is given then we are increasing the fixed acidosis, since we have about 50 meq/l of chloride in excess. Thus, we usually give half the fluid as isotonic sodium chloride as such, and half the fluid is given as $1/6$ molar sodium lactate to correct the acidosis.

In the first 2-7 hours, it is frequently necessary to give 1500 - 2000 cc. of this mixture of equal parts normal saline and $1/6$ molar sodium lactate solution. After the blood sugar has come down to the renal threshold, e.g. approximately 200 mgms.% one may then use $2/3/5\%$ glucose and $1/2$

normal saline. The glucose is metabolized and leaves sufficient free water for the kidney to excrete the fixed acids and regulate the electrolyte imbalance.

Severe potassium deficiency is rarely seen in juvenile diabetes, but if the patient is unduly weak or respirations are shallow following insulin and fluid therapy, potassium solution (Travol or Darrows) may be given intravenously. However, as soon as the patient can drink, orange juice, milk and broth, provide excellent sources of the necessary potassium.

Finally, as soon as the insulin has been given and an intravenous started, the stomach should be emptied by passing a stomach tube. This will prevent aspiration of vomitus and frequently prevents continued retching.

Late Complications

After the discovery of insulin, it was hoped that all aspects of the disease would be controlled by its action.

However, a large number of serious complications have been found in juvenile diabetes 15 or 20 years after the onset of this disorder. Most of these are referable to the disease of the vascular system. Degeneration of retinal vessels leads to aneurisms and haemorrhages from the veins. These lesions are thought to be the counterpart of the Kimmelstiel-Wilson lesions in the kidney. Atheromatosis, causing vascular occlusion in the coronary and cerebral circulation are not uncommon—while a Moncksberg's sclerosis of peripheral arteries is almost universal.

There is growing evidence that much of this type of degenerative change can be prevented by more careful regulation of the CHO metabolism. However, there may be additional factors present.

For example, it has been shown that kidney lesions do not develop in animals made diabetic with alloxan unless ACTH is also given. Conversely, diabetics with associated Addison's Disease do not have vascular lesions.

It may be that continued poor control of CHO metabolism leads to a stress reaction which causes the complications or the adrenal disorder may be an associated phenomenon causing hypertension and renal and vascular failure.

This is one of the large and unsolved problems in diabetes today.

All the complications of diabetes, however, are not of an organic nature. Behaviour problems are frequent. Brought on, in part, by the child in his desire to be the same as the rest of the gang. This leads to a disregard for diet. It may be aggravated by an over-solicitous parent. Rebellion and conflict with his parents and a sense of deep injustice may lead to frequent severe lapses in diabetic management.

In an effort to throw off parental control, the juvenile diabetic is prone to cast aside his diabetic regimen as well.

It is the responsibility of every physician who takes on the care of juvenile diabetics to make certain that as the child grows older it is educated in the meaning and purpose of dietary control, urine testing and the administration and action of insulin.

Parents should be told of the necessity of allowing the diabetic to assume the management of his diabetes as early as possible. Some children of 7-8 years of age give their own insulin, keep records of their tests and know their diets. By the time they are adolescent all diabetic children should be fully responsible for their own day to day management.

Parents and patients both must be encouraged to develop a sane philosophical attitude to their condition. They should neither be so anxious that their whole life is devoted to the goal of controlling the blood sugar, nor on the other hand, should they disregard entirely the proven methods of living comfortably with their disease.

To paraphrase an old saying, they should develop the philosophy of "Controlling diabetes in order to live—NOT—Live to control the diabetes."

A great help to both parent and child in this regard is to belong to their local diabetic association. Here, they can get much moral support from fellow travellers. They can also get authoritative and helpful information from the literature provided. In addition with the consent of their physicians, the Association's dietitian is pleased to help them plan menus within the confines of their prescription, as well as gauged to their purse.

One aspect of such an association, is the way various members help each other find answers for the hundred and one things in every day living.

How to manage a children's party, how to overcome behaviour problems, how to travel, etc.

One of the most useful things such an Association does, is to provide camps for diabetic children. This not only allows the children to enjoy a holiday under proper supervision, but at the same time relieves the mother of the necessity for constant vigilance and the task of producing prescribed meals, daily, and on time.

I do not know how a community can do without such an Association. It takes at least half the load of work off the physician. It is true that to initiate such a group locally, the physicians must take the lead and continue to lend their support in its educational and advisory activities.

Diabetes is a disorder that must be understood by and regulated daily by the patient rather than his doctor. His measure of health, his ability to escape to a large extent the serious complications of kidney, heart and eye disease are largely in his hands. It is the physician's duty to ensure that his patient has this knowledge to control his condition properly.

"Problems of the Newborn Infant"

A series of case reports and commentaries from the files of the Winnipeg General, St. Boniface and Children's Hospitals, illustrating factors which affect the survival of the infant during his first week of life.

SERIES V

Fetal Salvage Following Previous Stillbirths in Hemolytic Disease of the Newborn

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Early adequate exchange transfusion has profoundly altered the prognosis in the liveborn infant with hemolytic disease of the newborn. Even in severely diseased infants death or kernicterus following adequate treatment should be less than 5%. However the outlook is still poor for the infant of the unfortunate woman whose Rh sensitization is such that she has produced previously a stillborn infant or one with fetal hydrops. Although exceptions do occur it is usual for these women to continue to have babies who die in utero, or within a few minutes of birth with hydrops fetalis. This holds true only for those whose husbands are homozygous Rh positive. Should the husband be heterozygous there is a 50% chance of a normal Rh negative infant. The fetal prognosis following previous stillbirth has been so poor that therapeutic abortion and even sterilization in such women has had its advocates.

It seems probable that most of the fetal damage in hemolytic disease of the newborn is concentrated in the last few weeks of pregnancy. Therefore termination of pregnancy at 36 to 38 weeks would seem a reasonable procedure. However the relatively milder degree of illness in these babies has to be balanced against the apparent greater susceptibility of the premature infant's brain to damage from hyperbilirubinemia. Mollison and Walker showed that in a random sample of these infants the prognosis was better in those where pregnancy was allowed to proceed to term¹. In their study repeat exchange transfusions were not being done, and no attempt was made to follow the levels of serum bilirubin.

Since multiple exchange transfusions have proven of definite value in the very severely diseased full term infant it seemed likely that rigorous application of this technique might improve the prognosis in the premature. As it is clear that term delivery holds little hope for the woman with a previous stillborn infant due to hemolytic disease it was decided to induce early all women with such a history where the husband was known to be

homozygous. The exact time in pregnancy when induction was performed depended on the age at which fetal death occurred in previous pregnancies where this could be ascertained.

The following three consecutive cases of early induction, because of previous stillborn hemolytics, are presented.

All exchange transfusions were done through the umbilical vein. Two blood volumes (80 cc. per pound) of blood were used in each exchange. Relatively fresh blood (under four days old), was used in all exchanges. Older blood may cause sudden death from hyperpotassemia.

Case 1

Mrs. G. W. Age 28. Group AB, Rh Negative. Husband homozygous Rh positive.

Past History

1947, normal male, Rh positive.

1948, stillborn macerated fetus.

1950, stillborn macerated fetus. (died at 34 weeks).

1951, stillborn macerated fetus.

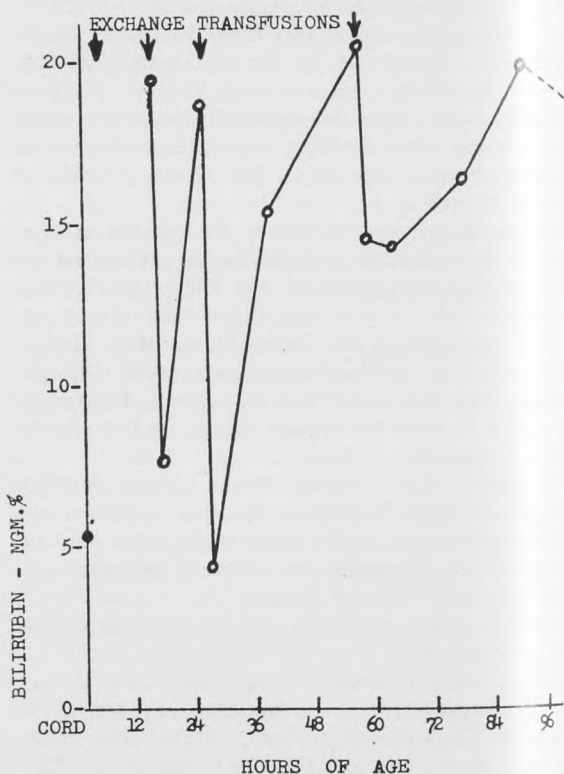


Figure 1
Serum Bilirubin. Effect of Exchange Transfusions

Present History — Expected date of delivery December 27, 1954. Antibody level constant at 16 (albumen). Admitted W.G.H. Maternity Pavilion Oct. 28, 1954. Surgical induction and pitocin drip. After four days delivered a 3 lb. 11 oz. baby girl.

Estimated fetal age 32 weeks. Blood group O, Rh positive, Coombs positive.

The infant was pale and very ill; both liver and spleen were greatly enlarged. The cord blood hemoglobin was 6.7 gms.%, the bilirubin 5.2 mgms.%, indicating a severe degree of hemolytic disease. Exchange transfusions were performed at three, 16, 26 and 60 hours of age. Because of technical difficulties the fourth exchange had to be terminated after only two thirds of the planned volume of exchange had been completed. As in all cases of hemolytic disease of the newborn the indication for the repeated exchanges was a serum bilirubin approaching 20 mgms.%. At 92 hours of age the bilirubin again reached a critical level (19.3 mgms.%) but as the clinical jaundice diminished steadily thereafter no further treatment was necessary. (Fig. 1). She was discharged on the 38th day of life clinically quite normal save for moderate anemia (8 gms.% hemoglobin). At 6½ months of age her hemoglobin had risen to 10 gms.% and she was clinically and developmentally a normal baby after allowance had been made for her prematurity.

Case 2

Mrs. H. V. Age 39. Group A, Rh negative. Husband homozygous Rh positive.

Past History

1945, normal boy. (killed in street accident at age 7 years).

1948, Hemolytic disease of newborn. Severe jaundice, died at 4 days of age.

1950, stillborn fetal hydrops.

1952, stillborn fetal hydrops. Fetal death at about 35 weeks.

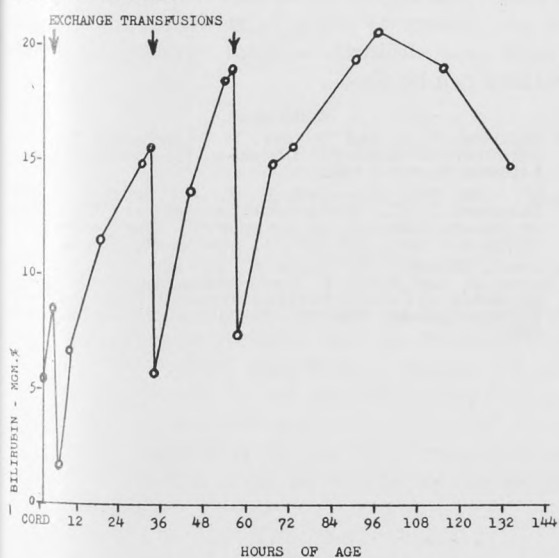


Figure 2

Serum Bilirubin. Effect of Exchange Transfusions

Present History — Expected date of delivery March 29, 1955. Antibody level constant at 4 (albumen). Admitted W.G.H. Maternity Pavilion February 11,

1955. Minimal antepartal hemorrhage. X-ray showed the head to be relatively high. As some degree of placenta praevia could not be excluded a lower segment cesarean section was performed on February 12. A living baby boy was obtained, birth weight 4 lbs. 12 oz., group O, Rh positive, Coombs positive. The baby was pale and very ill with a grossly enlarged liver and spleen. The cord blood hemoglobin was 6.0 gms.%, the bilirubin 5.4 mgms.%.

Exchange transfusions were performed at two and a half, 30 and 54 hours of age. Thereafter the bilirubin slowly rose to a critical level (20.5 mgms.%) at 97 hours of age. However, with no further treatment it fell steadily thereafter (Fig. 2). The first and third exchange transfusions were uneventful. During the second there were two episodes of apnea from which, however, complete recovery was made, and it was possible to complete the transfusion. The remainder of the course in hospital was quite uneventful; there was never evidence of brain damage; and he was discharged on the 26th day clinically normal and gaining weight well. Sufficient time has not elapsed for followup.

Case 3

Mrs. E. H. Age 37. Group O, Rh negative. Husband—homozygous Rh positive.

Past History

1940, Group O, Rh positive transfusion.

1945, miscarriage.

1947, stillborn fetal hydrops.

Present History — Expected date of delivery May 1-8, 1955. Antibody level 64 (albumen) during

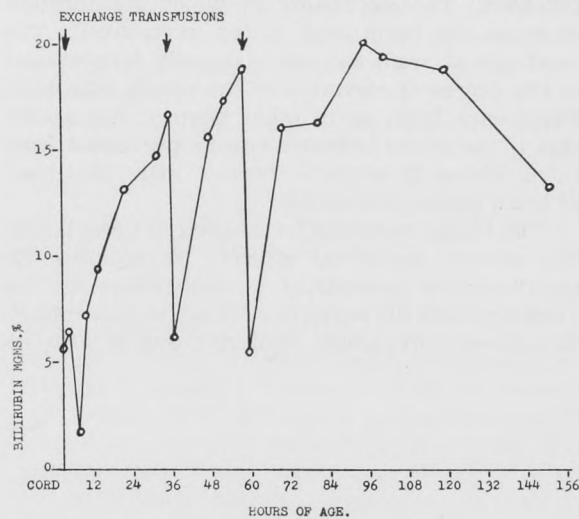


Figure 3

Serum Bilirubin. Effect of Exchange Transfusions

early pregnancy, later rise to 128. Admitted W.G.H. Maternity Pavilion March 21, 1955. She made no progress following surgical induction and pitocin drip. As the fetal heart became very poor 48 hours after the induction a lower segment

Cesarean section was performed March 24. A living baby boy was obtained, birth weight 4 lbs. 13½ ozs., Group O, Rh positive, Coombs' positive. He was very pale and ill with a moderately enlarged spleen and liver and rather marked substernal inspiratory recession. The cord blood hemoglobin was 11.5 gms%, the bilirubin 5.7 mgms%. Exchange transfusions were performed at 20 minutes, 34 and 55 hours of age. The first and second were uneventful, but the third had to be terminated after 50 cc. per lb. of body weight because of periods of apnea. The baby recovered quickly and thereafter gave no cause for serious worry. The bilirubin rose to 19.35 mgms.% at 94 hours but subsequently fell steadily (Fig. 3). He was difficult to feed initially and gained slowly. At 18 days of age the hemoglobin had fallen to 8.4 gms.%. Usually such a level would be disregarded but as his progress was not satisfactory a single transfusion of 50 cc. of group O, Rh negative packed red cells was given. Thereafter he fed normally and made a satisfactory weight gain.

From the 16th to the 20th days he had a mild staphylococcal enteritis from which he recovered completely following treatment with erythromycin.

At the time of discharge, at 30 days of age, the substernal recession had disappeared, and he was clinically normal having never had any evidence of brain damage. Insufficient time has elapsed for followup.

Discussion

There is little doubt that in the live infant the lethal and brain damaging factor in hemolytic disease of the newborn is the excessive circulating bilirubin. The mechanism by which the bilirubin damages the brain cells is not understood. The incidence of brain damage is directly proportional to the degree of elevation of the serum bilirubin². Experience here, as in other centres, has shown that if the serum bilirubin can be prevented from rising above 20 mgms% there is little likelihood of brain damage occurring.

The initial exchange transfusion in these babies has several beneficial effects. It replaces Rh positive cells susceptible to destruction by the antibody with Rh negative cells not so susceptible; it removes circulating antibody; and it also re-

moves circulating bilirubin. The sole purpose of repeated exchange transfusions is the mechanical removal of bilirubin. Figures 1, 2 and 3 show the bilirubin levels and the effect of exchange transfusion on the bilirubin in the three cases presented. Each complete exchange transfusion depressed the bilirubin level by 50-70%.

There can be no doubt from the clinical and laboratory findings at birth that babies 1 and 2, probably also 3, would have died in utero had pregnancy been allowed to proceed to term. These three babies show that with proper management the prognosis for the infant following previous stillbirths in hemolytic disease is much better than previously supposed. Induction sufficiently early should result in living infants. Even the small premature should survive with an undamaged brain if care is taken to keep the bilirubin below 20 mgms.%. Followup on these infants is incomplete but we know that the chance of any infant with hemolytic disease, who shows no signs of brain damage in the newborn period, subsequently developing evidence of brain damage is only 1 in 25.3

As a result of our experience with these three babies we recommend early induction for all Rh negative women, whose husbands are homozygous, who have had a previous stillbirth or fetal hydrops due to Rh incompatibility. Induction should be performed at least a week earlier than the estimated time of death of the previous infant and if not successful fairly promptly in precipitating labour should be followed by Cesarean section. No hesitation should be felt about induction at 32-33 weeks. Waiting an additional two or three weeks in an attempt to get a larger baby may simply result in a stillbirth or fetal hydrops for which nothing can be done.

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Article

Doctor-Patient Relationship in Diseases of Serious Prognosis

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Introduction

The relationship between patient and doctor does not lend itself readily to scientific analysis. This encounter between two human beings produces varying results which are difficult to set down in the form of a graph or table.

In the dissecting room the medical student studies the relation of one structure to another, and in the laboratory he studies the reaction of one chemical with another. He learns about the effects endocrine organs have on each other and about the associations shared by various metabolic pathways. These facts can be determined by specific and scientific studies of investigation. But the graduate soon uncovers another important relationship which is not so easily assessed. Now he is no longer only a discoverer, he is a participant and is being observed as well as observing. Such a relationship is the one that obtains between doctor and patient, and when this relationship is further conditioned by a disease of serious prognosis it becomes charged with enough significance to be worthy of some serious thought. Certainly, however, much of what will follow can apply to the relationship in general. The stakes are not as high, but it is still the same game.

The Problem

The truth or not the truth,
That is the question.
Whether 'tis better to bare the facts
As they reveal themselves;
Or to clothe them with some measure,
And lay a claim to dignity.

With apologies to Shakespeare.

In medicine we have always insisted on scientific accuracy and truth. Our everyday practices are concerned with diagnosis; we are careful to do repeat determinations, and to make sure results are statistically significant. But in the field of human relations we tolerate the lack of truth. We admire people who are diplomatic and discreet as well as those who are outspoken and frank. We exhort ourselves to obtain the truth about a patient's illness, and then do battle with ourselves to decide if and how we should repress, alter, or compromise it. In what manner and to what extent should the patient be acquainted with his problem?

The Cast

Doctor

The personality and attitude of the physician will naturally influence the answer to this question. At one end of the scale we have the doctor who is assiduously dedicated to absolute

honesty. He may be either very abrupt or loose of tongue but he prides himself on being absolutely frank and squaring off face to face with the problem. He subserves his dogma, not his charge, although he may imply that he is catering to the latter.

This type may behave in such fashion for many reasons. He may be afraid to lose face and prestige if the patient subsequently finds out the nature of his disease. He is protecting his reputation! He may hope to avoid adverse criticism when symptoms progress and therapeutic regimes fail. Under the same circumstances he may hope to resist any feelings of guilt, frustration and inadequacy which refractory diseases always engender in the physician. He may feel that there is a deep trust in this relationship (which there is, certainly) but he implies by his role that the patient must know all that he himself knows and does not know. Perhaps he hopes by his outspokenness and air of finality to avoid a long drawn out emotionally fatiguing experience. He would prefer to be rid of the whole painful situation.

Whatever be his psychobiology or psychopathology, this obsessive physician is so dedicated to the truth, the whole truth, and nothing but the truth that he believes that anything that is not the truth is therefore a lie. Surely he is wrong. The distinction between true and false is quantitative; it is more often a question of "both-and" rather than "either-or". Truth after all may be a very intangible thing, as difficult of definition as is love or friendship. There must be more than one kind of truth, a truth of the heart as well as of the reason!

"When my love swears that she is made of truth
I do believe her; though I know she lies."

Shakespeare.

Truth for truth's sake may be altruism at its finest but I doubt that the relationship between doctor and patient should be the testing ground of such a challenge.

At the other end of the scale is the physician who is unable to be a bearer of ill-tidings. He may, knowingly or unknowingly, feed anxiety with the milk of doubt. Such is the one who reassures the patient that his heart is good but at the same time prescribes digitalis and diuretics and imposes serious restrictions. His actions belie his words.

Somewhere between these two lies the ideal physician. He is neither alarming nor overly sanguine, he tells only some of what he knows and some of what he does not know. He relieves anxiety with reassurance; he replaces fear with quiet understanding. He clears the air but does not darken the horizon. He creates hope out of despair.

The Patient

Each patient will bring into his relationship with his physician certain qualities that are peculiar to himself. However, there are certain observations that can apply to most patients.

The patient who either thinks he has a serious disease or who is told he has a serious disease suffers from anxiety. Its cause is the threat which the disease poses to his hopes, ambitions, and very life. Weakness and tiredness are the commonest manifestations of his sense of hopelessness and fear. He harbors the common misconception that what is not safe is therefore dangerous and what is not good is therefore bad. But, mark you, this conception is never expressed, and the physician's failure to realize this omission may have far reaching consequences. One must anticipate what the patient cannot bring himself to tell or ask. The patient with coronary artery disease and angina pectoris is told that his pain is arising from his heart. Pain from the heart is not safe; it must therefore be dangerous. I have never failed to note a sense of relief in such a patient when I have pointed out how angina can actually be turned to his advantage. The inevitable comment follows, "You know, doctor, I have never thought of it that way before".

The patient who fears for the worst will misconstrue, mishear and draw false conclusions. He will find double meanings where none existed—like a lawyer in court he looks for weaknesses in the doctor's evidence and is ready to pounce upon any stray or wayward word. Every nod of the head means something, every gesture is interpreted to either confirm or deny his preformed suspicions. If the physician is too persuasive he may feel that elaborate pains are being taken to deceive him; if the physician is not reassuring enough it confirms his fears.

The Relationship

For the sake of discussion let us examine the case of a patient with cancer. By virtue of its frequency and seriousness this disease involves patient and doctor in just such a relationship as the one under examination.

The increased cancer consciousness of the public has prompted some surgeons to feel that patients should be told if they have a cancer. Earlier diagnosis and advances in treatment which have brought about a higher cure rate have contributed to this attitude; surveys and questionnaires showing that the vast majority of such patients do want to know the truth have fortified such a position.

In one survey¹ involving 100 cancer patients who were told of their condition, 89 percent stated they preferred knowing, but only 73 percent thought that people in general should be told. This discrepancy between wanting the truth for oneself

but not for the other person is likely based on the premise that the other person may be a more vulnerable quantity than oneself. Certainly in my own experience far less than 73 percent of the patient's family want the afflicted member to know the truth.

I consider that it may be proper to tell a patient that he or she has a cancer under the following conditions:

1. When there is every reasonable assurance of achieving a cure. Cancer of the skin is an excellent example.

2. When the nature of the operation or treatment makes it easy for the informed patient to realize that the condition is cancerous. A radical mastectomy, an abdominoperineal resection, the application of radium, a laryngectomy, an amputation of an extremity, etc., may be difficult to explain on a benign basis. In so far as an intelligent patient is concerned the explanation must be in keeping with the treatment.

3. When the cooperation of the patient cannot be obtained in any other way.

However, when a cure is uncertain (as it is in most cases) and when the patient has no way of knowing the true nature of his illness, a less direct approach may be better. This applies to cases of visceral cancer e.g. stomach, bowel, lung, kidney, etc. The word precancerous is a convenient term that can be employed to advantage in such cases that have come to surgery. It implies that the condition is serious, ensures future cooperation but at the same time does not lead to despair. For less informed patients the word growth or tumor may be used instead of the word cancer. Other partial truths may be employed. The symptoms of a patient with inoperable bronchogenic carcinoma may be adequately explained on the basis of the complications. Words like collapse, infection, and pleurisy will cover the situation. A patient with metastatic node involvement may be content with a diagnosis as simple and unqualified as enlarged glands. Explanations, reports, and diagnoses should be given in a direct and matter-of-fact fashion. If the physician feels that he is thus acting in the best interests of the patient, he will play his part convincingly and the latter will accept any reasonable statement at its face value.

No matter how much a patient suspects that he has an incurable cancer or a recurrence of same, as long as he is not told this in so many words, he can still cling to the hope that it may be something else. The forces that make us cling to life are stronger than those that make us despair of it. No matter how ill a patient may be, and no matter how often his thoughts have turned to death, he still thinks in terms of eventually recovering or at least escaping death on that particular occasion. I think this is a basic behaviour

pattern. As long as there is life there is hope. As long as he is not led to believe otherwise he has hope. But remove this hope and you destroy his spirit.

Few patients ask directly whether they have a cancer or not, or whether their disease is a fatal one. They do want to know what is wrong, and what, if anything, was found on examination or surgery, but some mental block prevents most of them from enquiring in an outright fashion. This would indicate that they do not want to know the worst that they fear. An explanation of their illness must naturally be offered spontaneously and as soon as possible, otherwise silence will nurture doubt.

Sometimes, years later, the patient may unblock and ask if in fact he did not have a cancer years ago. In such circumstances I would answer in the affirmative if I considered the case a cure; and in the negative if I did not. You will not lose face or report if your answer is now yes when it was no before. The patient now wants to know, whereas before he really did not want to know.

Another problem is to know how to handle those few patients who do ask directly and want it "straight from the shoulder". My own feeling is that the answer should depend not so much on the assessment of the person asking the question, but on the assessment of the condition. If the prognosis in question is hopeful I would be in favor of giving a direct answer; if the condition is indeed one where cure is unlikely I would not yield to this direct frontal attack. My touchstone is one of never destroying hope.

Hope is the prospect of a chair life for the bed-ridden, of a life on crutches for the chair-confined, of normal activity for the crutch-handicapped. It is the prospect of well-being, of activity, and of usefulness. Hope may be difficult to nurture or it may respond to such a simple measure as an assured pat on the shoulder or a ready smile. A man who is seriously ill should not be persuaded to think that he is well; but neither should he be made to feel that nothing can be done for him.

Adopting such a course as I have suggested has its problems. There are facilities for many slips.

Hospital personnel, internes, relatives and friends, may create doubt in the patient's mind that his condition is more serious than he was given to believe. A son or daughter suddenly comes home; friends and associates become most solicitous and concerned. These developments, it is true, may make him suspect the worst but they do not offer insurmountable problems. The true state of affairs need not return to the patient. In my own experience the relatives seem to muster additional courage and strength and reinforce the doctor's position. The objection that the true state of things has a way of finding its way back to the patient is a valid one but not a reason for disclosing a diagnosis which is otherwise better left unsaid.

Conclusion

One cannot adopt a rigid policy for our problem. The character and personality of both patient and physician and other factors condition and determine the form the relationship takes in each case.

Instead I would like to offer a few principles to keep in mind.

1. **Primum non nocere.** If you cannot cure your patient at least do not do him any harm. Some few patients need to be told the true state of affairs in order not to be harmed, although many patients can be harmed by such an attitude. The problem is to know the proper course in the individual case.

2. The truth must be adapted to the patient and the patient must be adapted to the truth. By this means we can keep the patient at a maximum level of adjustment.

3. Very few people can accept with equanimity the knowledge of a fatal illness, the young almost never. Such knowledge has a highly morbid effect with varying symptomatology out of proportion to the disease. The morbid effect is due to the destruction of that human attribute called hope. Wordsworth has said:

We live by hope
And by desire; we see the glad light
And breathe the sweet air of futurity
And so we live; or else we have no life.

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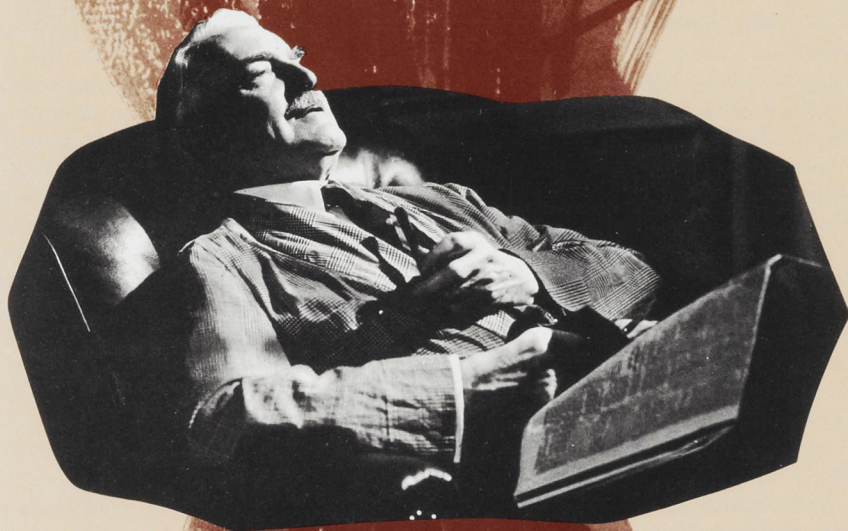


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Medical History

Three Inquests of Historical Interest

Part II

Dr. Athol Gordon

The Case of the Literary Firebrand

Christopher Marlowe

The birth of the English Stage saw the arrival of seven great writers on the scene — John Lyly, Thomas Kidd, Thomas Lodge, Thomas Greene and Christopher Marlowe. The greatest of these was Marlowe, born in 1564 just after the 39 Articles were imposed upon the English Clergy, and just before the marriage of Mary Queen of Scots to Lord Darnley. He died at the age of 29 years in 1593, as the Elizabethan court was passing from hand to hand, and quoting a new poem called *Venus and Adonis*, by a young poet from Stratford on Avon by the name of William Shakespeare of whom nobody had heard before.

In that short 29 years Marlowe founded English Romantic Tragedy, and was famous not as the others were famous — from their proximity to Shakespeare, but rather in his own right, being the author of *Tamburlaine*; *The Jew of Malta*; *Hero and Leander*; *Edward the Second*; and *Doctor Faustus* — which last became the model for Goethe's *Faust*, and the *Jew of Malta* for *The Merchant of Venice*.

He was reared in the pious atmosphere of Canterbury Cathedral, and, sensitive to a degree to human feeling, he met the influence of Doubt and Metaphysical Speculation as it came hot from across the Channel. He heard the philosophical sophistry of Machiavelli — all this during his adolescent period. And so to his death he bore the marks of suspicion, as one who had touched pitch and became defiled, because he loved to shock the staid religious and Puritan minds around him. Losing the Englishman's most treasured asset, a sense of humour, he became a reckless, flaming, poetic spirit, consumed in his own fire. He was born two months before William Shakespeare and died twenty-three years before him.

He became a King's scholar at Cambridge, a tribute to his scholastic brilliance at Canterbury. It was not wise to say in Cambridge: "All Protestants are hypocritical asses, and if there be any God or any true religion, it is the Papists". This basic philosophy became the cause of his being from then on under suspicion; and it relates obliquely to the manner of his death.

He achieved his M.A. standing, but the University authorities were very reluctant to grant him his Degree. He had been away to Rheims, probably as a secret service agent, of which there were many in his day and Elizabeth's, and so, in spite of his heretical and Papist leanings, he was

finally granted the degree — under heavy government pressure.

He plunged into the literary life of London and gained name and fame — name as a quarrelsome brawler and suspect heretic (even three constables went in fear of their lives for him) — fame for his giving to the Town the tragedy of *Tamburlaine*.

Machiavelli was not unknown among the intelligentsia, but through the translations of Gentillet, Marlowe gave him to the Theatre and so to the people in "*The Jew of Malta*".

The play became immensely popular after the hanging of Dr. Lopez, M.R.C.P., Queen Elizabeth's personal physician, on a charge of attempting her life by poison, and, besides, he had made some rather unprofessional revelations of the character and diseases of the Earl of Essex, whose star was as yet in the ascendant.

Christopher Marlowe exhibited a fine catholicity of taste in his associates; he numbered among his friends Sir Walter Raleigh, the Queen's favourite, the scientist Harriott, Sir Francis Walsingham at the hub of power in the Government Service, Ingram Frizer, the swindler, and Skeres, the cutpurse.

Thomas Kidd had issued certain inflammatory placards against the Flemish immigrants from the Low Countries, then under Roman Catholic persecution. Riots had resulted and Marlowe's name was suspect as co-writer. He was therefore summoned before the Privy Council for interrogation, coming up from Walsingham's country house in Kent. The plague was raging in London at the time, so Marlowe stayed in Deptford, 10 miles from London.

On the morning of May 30th, 1593 at 10 o'clock he went to Dame Elinor Bull's tavern with Ingram Frizer, Poley and Skeres on some dark business that required meals in the private room. Poley had recently come back from the Hague with official papers.

The record states that they went to the inn — "and there passed the time together and dined; and after dinner were in quiet sort together there, and walked in the garden belonging to the said house until the sixth hour after noon of the same day; and then returned from the said garden to the room aforesaid and there together and in company, supped." The blood alcohol is not recorded.

Then came a game of backgammon with Frizer, Poley and Skeres sitting side by side on a bench at one side of the table, while Marlowe lay on the bed beside them. Frizer, the middle man in the trio, finding his dagger in the way, slung it round behind him. Suddenly, high words began as

Frizer started talk about the payment of the reckoning. Marlowe, feeling that he had been an invited guest, refused a share in the bill whatsoever. Marlowe drew Frizer's dagger and gave him two wounds, two inches long and a half inch deep on the head.

The record goes on: "Frizer in his own defence and for the saving of his own life, then and there struggled with the said Christopher Marlowe, to get back from him the dagger aforesaid; in which affray the said Ingram could not get away from the said Christopher Marlowe. So it befell in that affray that the said Ingram in defence of his life, with the dagger aforesaid of the value of 12d gave the said Christopher then and there a mortal wound over the right eye, of the depth of 2 inches and of the width of 1 inch; of which mortal wound the aforesaid Christopher Marlowe then and there instantly died."

The inquest was held the day following the murder or assassination, whichever it was. Certainly the veracity of the witnesses was far from being above suspicion, and the dead Marlowe could not testify. The circumstances would fit quite well with the theory of assassination.

And, above all, this peculiar inquest fell within the jurisdiction of Danby the Coroner of the Verge, that sacrosanct circular area of a twelve mile radius from the person of the Sovereign. Was Coroner Danby himself above suspicion?

The Court of Chancery issued a writ of certiorari to the Coroner demanding: "If Frizer had killed Marlowe with malice aforethought, or was the killing in self defence, indicating a murder charge, justifying a pardon?" The Coroner promptly returned the writ with a verdict of "self defence", and a veritable Pandora's box of gossip and rumour flew open to emit a great swarm of soul blackening pamphlets, which bore the greater weight on account of the wild and quarrelsome life of the victim. Many of these were from Puritan preachers and such like, together with Marlowe's literary enemies—and he had many. Were some of them government inspired? This question remains still unanswered. The brawl became one over a tavern wench, and it was said in a Puritan pamphlet that "he cursed and blasphemed to his last gasp, and together with his last breath an oath flew out of his mouth: This is, to say the least, doubtful if the inadvertent or intentional pre-frontal lobotomy was as described. Let us hope that a period of coma permitted the quiet departure of this brilliant, self tortured soul. The closing words of Dr. Faustus seem almost like a terrible pre-mortem epitaph:

"Cut is the branch that might have grown full straight

And burned is Apollo's laurel bough

That sometime grew within this learned man.

Faustus is gone: regard his hellish fall,

Whose fiendish fortune may exhort the wise,
Only to wonder at unlawful things,
Whose deepness doth entice such forward wits
To practice more than heavenly power permits."

Terminat hora diem . . . terminat auctor opus.

The Case of Katherine Hamlet, an Inquest Which Bore Immortal Fruit

The stories of river deaths by drowning or accident copiously besprinkle the records of all coroners. These are nearly all quite brief and do not reflect the pity and heartache involved. They seldom evoke anything very useful to our troubled civilization other than an occasional stricture upon careless parents, or the installation of some safeguard to prevent a repetition of the tragedy at that particular spot, or sometimes the pursuit of a murderer. The story you are now about to hear is indeed a brief one, but its sequel is for all time.

The scene is Stratford on Avon, at the town end of the great 14 arched stone bridge. The time is 1580 and the bridge is already about 100 years old. In Butt Lane leading to the archery butts, the coroner's jury is assembled. Their steaming breaths, blue noses and fingers ensure a short inquest; and, if the cold were not enough, the state of the body of Katherine Hamlet, drowned in the Avon at Tiddington, a mile upstream, 8 weeks ago, would most certainly hasten the proceedings. She had been buried in the churchyard but had been exhumed for this second inquest, for a serious doubt existed in the minds of the townsfolk and the authorities as to the propriety of her resting in sanctified ground. According to the ancient and still existing custom the jury were sworn "Super Visum Corporis".

Everything depended on the verdict; for the suicide so pronounced by the coroner's jury was to be buried at a cross-road, in a crooked grave, with a stake driven through the heart. The cross and stake ensuring the holding of the wicked and evil spirit within the grave, for the protection of those goodly saved souls above ground as they went about their business.

Yesterday, 9 miles away at Balshall, a coroner's jury had done their work well with John Shakespeare, found hanging from a beam in his house. Their verdict was "That regardless of the salvation of his soul, and led astray by the instigation of the devil, tied a rope round his neck, fastened the other end of a beam, and with criminal intent, hanged himself." No churchyard burial for him.

But for poor Katherine Hamlet the finding was different. The Coroner, Master Henry Rogers, Town Clerk and Steward of Stratford is writing the verdict as his 16 year old apprentice Will Shakespeare looks on: "iens cum quodam multrale Anglice, a pail. ad afferendam aquam, ad rivum, stans super ripam eiusdem—subito ac per

infortunium, lapsit et cecedit et submersa fuit; devenit". No murder or *felo de se*, verdict here—and Katherine Hamlet is returned to "Christian burial". We may wonder if the tongue of idle gossip was silenced or not.

In 1601, twenty-one years later, the lawyer's clerk is writing the famous tragedy of Hamlet, Prince of Denmark; and it is remarkable that his treatment is so closely governed by the circumstances surrounding this inquest. First comes the court story of the affair, weighting the evidence in favour of accident.

The Queen speaks (explaining Ophelia's death to her brother Laertes:

"There is a willow grows aslant a brook,
That shews his hoar leaves in the glassy stream:
There with fantastic garlands did she come
Of crow flowers, nettles, daisies and long purples,
That liberal shepherds give a grosser name,
But our cold maids do 'dead men's fingers' call them:

There on the pendent boughs her coronet weeds
Clambering to hang, an envious sliver broke;
When down her weedy trophies and herself
Fell in the weeping brook. Her clothes spread wide,

And, mermaid-like, awhile they bore her up:
Which time she chanted snatches of old tunes,
As one incapable of her own distress,
Or like a creature native and endued
Unto that element: but long it could not be
Till that her garments, heavy with their drink,
Pulled the poor wretch from her melodious lay
To muddy death."

Hamlet: 4: 7-166.

The Church apparently felt that this was a suicide... and was strongly behind the exhumation... but the Coroner's jury stoutly averred that death was one of accident... and the courtiers threw in their strongest influence on the side of the jury.

Hamlet remarking the entry of the funeral to the graveyard:

"Who is that they follow,
And with such maimed rites? This doth betoken,
The course they follow, did with desperate hand
Fordo its own life: 'twas of some estate.

LAERTES: What ceremony else?

PRIEST: Her obsequies have been as far enlarged
As we have warranties: her death was doubtful:
And but that great command o'ersways the order,
She should in ground unsanctified have lodged
Till the last Trumpet: for charitable prayers,

Shards, flints, and pebbles should be thrown upon her:

Yet here she is allowed her virgin rites,
Her maiden strewments, and the bringing home
of bell and burial."

Hamlet: V: 1: 214-28.

The commoners, not well versed in the Law, but possessed of deep rooted conviction, and thriving on a rich diet of gossip, held varied opinions, and stoutly defended them.

The gravediggers discuss the rights of the case... they confuse *se defendendo* c. *felo de se*.

1st G. D.: Is she to be buried in Christian burial that wilfully seeks her own salvation?

2nd G. D.: I tell thee she is: and therefore make her grave straight; the crowner hath sat on her, and finds it Christian burial.

1st G. D.: How can that be unless she drowned herself in her own defense?

2nd G. D.: Why 'tis found so.

1st G. D.: It must be "*Se Offendendo*"; it cannot be else. For here lies the point: If I drown myself wittingly, it argues an act... and an act hath three branches: it is to act... to do... and to perform; argal she drowned herself wittingly.

2nd G. D.: Nay, but hear you Goodman Delver.

1st G. D.: Give me leave... Here lies the water; Good, here stands the man: Good... If the man go to this water and drown himself, it is, will he, nill he, he goes—Mark you that: BUT if the water come to him and drown him, he drowns not himself: argal he that is not guilty of his own death shortens not his own life.

2nd G. D.: But is this law?

1st G. D.: Ay, marry is't: Crowner's quest law.

2nd G. D.: Will you ha' the truth on't?... If this had not been a gentlewoman she should have been buried out of Christian burial.

1st G. D.: Why there thou say'st: and the more pity that great folk should have countenance in this world to drown or hang themselves more than their even Christian..."

Hamlet: V: 1: 1-29.

And so, Gentlemen, the story of that cold December day at Tiddington, a plain notation in the annals of the poor, came to be touched by what Ivor Brown so beautifully calls the Hand of Glory, transforming it into an imperishable tale, which I trust has proved of some interest to you this evening.

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DESTROYED

"... INDIVIDUAL
TRICHOMONADS ARE
DESTROYED WITHIN
10 TO 14 SECONDS
AFTER CONTACT WITH
A 1:250 DILUTION
[VAGISEC LIQUID]."

Davis, C. H.: J.A.M.A. 157:126 (Jan. 8) 1955.

In his new J.A.M.A. article, Dr. Carl Henry Davis reviews his experience with the new trichomonacide which he and C. G. Grand, research physiologist, developed under the name of "Carlendacide." Now available as VAGISEC* jelly and liquid, it has been shown on clinical trial to clear up even stubborn cases of vaginal trichomoniasis. "Adequate office and home treatment can effect a cure of *T. vaginalis* infections, if limited to the vagina, within four weeks."¹

Synergistic action. VAGISEC liquid attacks the trichomonad with three surface-acting chemicals.² The *chelating agent* tears out the calcium of the calcium proteinate from the cell membrane of the trichomonad. The *wetting agent* lowers surface tension and removes waxes and lipid materials from the cell membrane. The *detergent* denatures the protein. With the cell membrane destroyed, the cytoplasm imbibes water from its surroundings, swells up and explodes.³ *Synergism accomplishes this within 15 seconds!*

Thorough penetration. VAGISEC jelly and liquid penetrate the cellular debris and mucoid material that line the vaginal wall and reach hidden trichomonads that lie buried among the rugae. They dissolve mucinous material and explode hidden trichomonads as well as trichomonads on the surface of the vaginal wall.⁴

Trichomonads destroyed in 15 seconds. No other agent or combination of agents kills the trichomonad in this specific fashion, or with the speed of VAGISEC liquid.² Dr. Davis studied this action under the phase-contrast microscope and actually



saw individual trichomonads destroyed within 15 seconds of contact with a 1:250 solution.¹

Clinical tests. VAGISEC liquid has been clinically tested by over 100 leaders in obstetrics and gynecology. Those who have followed the plan of treatment have had better than 80 per cent of cures among non-pregnant patients with one course of treatment.¹

The Davis technic.† The Davis technic is a combination of office treatment with VAGISEC liquid and prescribed home treatment with both VAGISEC jelly and liquid.¹ Dr. Davis says that office treatment is an essential part of the technic.

Write for: reprint of Dr. Davis' article,¹ file card giving complete details of Davis technic, and pad of patient instruction sheets for home treatment. Address Julius Schmid (Canada) Ltd., 32 Bermondsey Road, Toronto 16, Canada.

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Active ingredients: Polyoxyethylene nonyl phenol, Sodium ethylene diamine tetra-acetate, Sodium dioctyl sulfosuccinate. In addition, VAGISEC jelly contains Boric acid, Alcohol 5% by weight.

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Abstracts from the Literature

Prognosis in Irradiated Cancer of the Cervix by Measurement of Cell Size in the Vaginal Smear:

Hugh M. Graham, B.S., and Katharine R. Goldie., *Cancer* Vol. 8, No. 1, Jan-Feb., 1955.

This paper discusses an effort to simplify the cytological examination for determining radiation response and hence prognosis in cervix cancer cases.

Of the four characteristic alterations in benign squamous epithelial cells of the vagina produced coincidentally with radiation of cervix cancer, increase in size is the most obvious and most susceptible to measurement.

Detail of techniques used to examine vaginal smears and measure cell sizes are reported. Data are presented showing that increase in cell size is of significance in prognosis. One hundred cases of cervix cancer treated by radiotherapy and followed five years are studied. The increase in benign vaginal epithelial cell size has proven to be proportional to the effectiveness of the therapy. Cell measurements were done by expert cytologists and relatively untrained personnel. These latter proved capable of a satisfactory degree of accuracy.

It is concluded that cell measurement provides an inexpensive prognostic index for radiation treated patients with cervix cancer.

R. L. Cooke.

Sinus Disease and Asthma, the Problem of Foci of

Infection: Goldman, J. L., Siegal, S., Arnold, L. M., Bloom, F. M., Freeman, I. Herchberger, C., *Laryngoscope*, March, 1955, Vol. 65, 3, pp. 152-170.

Eighty-two patients with bronchial asthma had complete sinus investigations to determine the role of sinus infections in their disease. The study included allergic, rhinologic and sinus x-ray examinations, together with microscopic and bacteriologic studies of nasal and sinus secretions.

There were 58 cases of intrinsic asthma, of which about 50% had sinus infection. Among 24 extrinsic cases about 20% had sinus infections. Infection is usually considered a causative factor in intrinsic asthma. In only half of the cases, however, was there evidence of sinus infection. Bacteriologic studies of sinus secretion made repeatedly revealed the occurrence of transient and multiple infections, suggesting that the microorganisms cause infection on a previously abnormal membrane as a result of vasomotor or allergic influences, rather than act as etiologic agents responsible for sinus pathology. In the correlation of sinus x-rays with bacteriologic findings, it was found that sinus infection could occur without abnormal x-ray findings and abnormal x-ray find-

ings could occur without sinus infection.

Studies of sinus membranes in intrinsic allergy indicated that hyperplastic allergic sinus mucosa may occur in the absence of infections, and infection when present appeared to be located chiefly near the surface of the membrane.

The authors conclude that sinus infection, as a rule, is not a primary cause of asthma but rather a complication superimposed on an altered sinus membrane. The management of sinus disease should be conservative at first and surgery resorted to only if persistent sinus infection or naso-abnormalities (i.e. polyps, deviated nasal septum) exist. The decision to employ radical sinus procedures should be determined by these factors rather than by the concept of bacterial allergy alone.

Jack A. Rubin.

Retrolental Fibroplasia: Ashton, Norman, *American Journal of Ophthalmology*, 39 (Number 4, Part 2):152-159.

The author has devised a new limbal window technique which permits direct microscopic observation of the retinal vessels in the living animal. The effects of varying oxygen tensions on the kitten retina (comparable to the premature human retina) were observed. Hyperoxia resulted in either partial or total obliteration of the vessels growing into the retina. When the animal was returned to air after several hours of oxygen exposure, the vessels were unable to reopen, due to intravascular coagulation or adhesion of the vessel walls. A profuse and disordered neovascularization then developed, producing a pathologic picture exactly analogous to the early stages of retrolental fibroplasia.

The author thus defines the two essential phases in the development of the disease, vaso-obliteration in oxygen and vasoproliferation in air. He emphasizes the importance of administering oxygen to the premature baby only when essential and then in the minimal amount consistent with the infant's survival.

Jerry F. Donin.

Candy Medication and Accidental Poisoning:

Council on Pharmacy and Chemistry, *J.A.M.A.*, 158, 44-45, 1955, (May 7).

In 1912, Dr. B. Fantus formulated basic requirements for candy medication. Fantus cautioned against prescribing more of the sweetened medication than would constitute a safe dose if it were consumed all at one time.

Today, antibiotics, antiepileptics, antihistaminics, barbiturates, sulfonamides, salicylates and vitamins are available as candy medication. Candy medication allows greater co-operation from

sick children. Attempts to force unpalatable drugs may cause physical and psychic trauma.

The disadvantage to the candied medicine is that the child, once well, may enjoy the sweet tablets and liquids, and thus ingest harmful quantities of the drug. Statistics in regard to aspirin poisoning in children strongly suggest that flavored aspirin has contributed to an increase in accidental poisoning proportionate to its availability. The usefulness of flavored medication to overcome or avoid resistance in young patients is recognized; however, the present casual attitude toward these products must be corrected, especially when it leads to indiscriminate use and careless storage. Ignorance of a drug's toxicity, carelessness in its use, and ready access to it must be combatted by measures such as precautionary labelling, safety containers, safety devices such as individual packaging in tough plastic film, and even restrictive legislation. Advertisements that state or imply a degree of safety not associated with the drug also engender carelessness.

A. G. Rogers.

Post-Hepatitis Cirrhosis. P. C. Reynell; Lancet, II, 215-216, 1954 (July 31).

Seven male and seven female patients with cirrhosis following viral hepatitis were followed at least 6 years, or to the time of death. All were seen within 3 years of their initial attack of hepatitis. 9 patients died, and 5 apparently recovered completely. The severity of the early symptoms and age at onset were no guide to prognosis. Persistently abnormal liver function tests, remaining abnormal during remissions, were of some prognostic value. The duration of symptoms was quite relevant, 4 of the 5 who recovered were clinically well a year after the first attack of jaundice. Probably any patient with post-hepatitis cirrhosis, or who has jaundice or other clinical evidence of liver disease 3 or more years after his first attack of hepatitis, will eventually die of liver failure even though he may have further remissions.

A. G. Rogers.

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C I B A
M O N T R E A L

Editorial

S. Vaisrub, M.D., M.R.C.P. (Lond.), F.R.C.P. (C.), F.A.C.P., Editor

Relations—Public, Semipublic, Private

*About the symptoms they disagree,
but how unanimous about the fee.*

Hogarth, 1750.

To the numerous and complex activities of organized Medicine there has been added recently a new one—"Public Relations". This activity, as reflected in the various media through which the public can be reached—the press, radio, films, television, etc., has somehow helped to create the impression in our minds that the problems involved are of recent vintage, unique to our modern age. This, indeed, is a misconception. Medicine is not a goddess, erstwhile worshipped, and now forcibly knocked down from the pedestal on which she has been comfortably poised for centuries. The horse and buggy doctor, lovable in retrospect, was not a hero admired and venerated by all his contemporaries. Not unlike his counterpart of today, he was a controversial figure, loved and hated, praised and vilified, exposed to the current of good will, as well as the cross current of hostility. As far back as biblical times we hear along with the complimentary "Honor a physician . . . in the sight of all great man he shall be admired", the succinctly sarcastic "physician heal thyself". References to physicians, both flattering and derisive (particularly the latter) abound in the folklore as well as literature of all ages. The derogatory remarks of Pliny, the satires of Juvenal, the vituperations of Nicolo Franco, the ridicule of Molière, the hostile attitude of L. Tolstoi, G. B. Shaw, E. Cronin, are but a few examples. The myth of the doctor recently fallen from grace is, thus, a product of vigorous imagination feeding on nostalgic memories. In the public eye the physician always walked the tightrope between villainy and sainthood.

The main sources of dissatisfaction with the doctor have always been the mistrust of his competence and integrity, and the fear of his fees. These causes of animosity have not changed. What has changed is the manner in which the public reacts to them. No longer content with letting off steam by grumbling or poking fun at doctors, it now seeks increasing control over their practices. Its demands, voiced in the lay press, are often supported by statements and accusations, which have little foundation in fact and which all add up to "bad publicity" for the medical profession.

Believing that much of the criticism levelled against the medical profession, is due to ignorance and lack of understanding of the conditions prevailing within it, its representative bodies in many centers have undertaken a program of education

of the public, loosely labelled "Public Relations". Special committees have been entrusted with the task of informing the public about the aims, activities, methods, and problems of the medical practitioner, and advising the doctors about possible sources of friction and misunderstanding between them and their patients. It is to the credit of these committees that this process of dissemination of information was never permitted to degenerate into Medical Apologetics or Medical Politics.

The officially organized and professionally financed (sometimes at no inconsiderable cost) public relations program is a relatively new development. Unofficially and on a much more modest scale, however, some of its good work was being done indirectly for some time by numerous voluntary agencies. The Boards of Sanatoria and Hospitals, Institutes for the Blind, the Multiple Sclerosis, Arthritis, Paraplegic, Diabetes, and other Societies have brought many laymen into closer contact with doctors, and helped to promote better understanding between them. Whatever the main objective of these voluntary societies, goodwill has often been their by-product.

Goodwill, of course, is intangible. Yet, it cannot be moulded out of the void. It can be enhanced by organized education, but it cannot be created by it. The raw material for goodwill must still be provided by the individual doctor-patient relationship. This relationship, unique and delicate, does not lend itself readily to facile analysis. It is complex and multifaceted (one of the facets, the doctor-patient relationship in diseases with a grave prognosis, is illuminated with a warm light by Dr. W. Karlinsky in his paper published in this issue,) and very private, yet it is the foundation upon which the edifice of "Public Relations" must be built in order to endure.

Ed.

Manitoba's Medical Men XVIII. Trans-Canada Medical Service

A report was brought into the Executive of the Manitoba Medical Association at their last meeting outlining the progress that had been made in regard to prepaid medical care embracing all ten provinces of Canada.

There was a great deal of pressure brought to bear on the profession to institute some form of prepaid medical care on a federal basis by the railways and large organizations that have business interests in widely separated parts of the Dominion. If an employee who has been on the Manitoba Medical Service for several years is transferred to another province, both the employee

and employer are interested in having a continuing coverage.

Most of the provinces already have some form of prepaid medical care, but they differ in some respects regarding the amount of coverage, the premiums, plans, and the possibility of extra billings. All of these factors have been taken into account and a plan has been tentatively approved by all the provinces so that final drafts should be available for further study in the very near future.

L. A. Sigurdson, M.D.

Manitoba Medical Service

XIX. Fee Schedule

A very contentious problem was placed before the Executive of the Manitoba Medical Association at their last meeting concerning a letter received from the General Practitioners' Association of Manitoba in which the following resolution was embodied:

"Be it resolved that the Manitoba Medical Service adopt one fee across the board for all participating medical members; and this shall follow the minimum schedule of fees as prepared in 1954; and that the privilege of extra billing be granted to all specialists."

At the present time there are two fee schedules for the M.M.S., one for the general practitioners and the other, about 25% higher, for the specialists. As is well known, the M.M.S. operates on a bloc system in which every specialty is placed in a separate bloc and the general practitioners are also placed in a bloc. General practitioners do not have to confine their practice but the specialist groups are required to confine their practice to their specialty. It is due to this restriction that the specialists are allowed to charge a higher fee for work done under the M.M.S. scheme.

It has been the contention of the general practitioners that since there is one premium to the subscriber, the service rendered should be one type of service and, on that basis, there should be one fee schedule which should be the M.M.A. fee schedule and that specialists should not be restricted within their bloc and can, if they so desire, charge the subscriber an extra fee, the limit of which could be arranged on some fair basis.

From the M.M.S. point of view the office routine and procedures would be enormously simplified. From the general practitioners point of view, they consider that, with the elimination of the division between general practitioners and specialists, their fees would be increased. From the specialists point of view, they would have the privilege of billing patients that are now on M.M.S. over and above their usual fee if they so desire. From the subscribers point of view, they would be in a position of not knowing whether they would be

fully covered for medical work or whether they would be getting an extra bill from the doctor. They would be the group most affected, and for that reason a great deal of care would have to be exercised on their behalf before the institution of any change in the present system. At the present time they are probably getting the best medical service for the least amount of money in Canada.

A resolution from the Brandon and District Medical Association was read as follows:

"THAT this meeting view with disfavor the resolution of the General Practitioners' Association that across the board M.M.A. Schedule of Fees be adopted with extra billing, and that we are in favor of the present method and fee schedule."

They maintain that extra billing is not feasible because "it is contrary to the principles of M.M.S.; it leads to bargaining; it creates disharmony and disruption of M.M.S. with possible withdrawal of specialist groups; it brings dissatisfaction to policyholders".

At the moment this problem is being studied by the Committee on Economics, the Committee on M.M.S. Membership and Procedures, the M.M.S. Board of Trustees, and specialist sections of M.M.A. The Executive was of the opinion that this should be publicized in the Review and that a great deal of thought should be given to this matter because it is revolutionary and not without danger. It will be one of the main problems that will be dealt with by the M.M.A. at the Annual Meeting in October of this year.

L. A. Sigurdson, M.D.

Letter to the Editor

Winnipeg, Manitoba,
July 8th, 1955.

Dr. S. Vaisrub,
Editor,
Manitoba Medical Review.
Dear Dr. Vaisrub,

At a recent meeting of the Benevolent Committee of the Winnipeg Medical Society, it was suggested that a notice be placed in the August-September number of the Review.

The purpose of the notice is to remind members of the Society of the benevolent fund in the hope that they will contribute to same. It was also felt that the notice would again bring to the attention of the members the fact that the fund is for the use of members and their dependants who may require financial assistance. The Benevolent Fund Committee is interested to hear concerning such cases. A blank cheque made out to the Benevolent Fund will accompany the notice for the annual dues in September.

Yours very truly,

K. R. Trueman, Chairman,
Benevolent Fund Committee.

Association Page

Reported by M. T. Macfarland, M.D.

Report of Nominating Committee Manitoba Medical Association For Officers 1955-56

Article 11 of the Constitution and By-laws provides that: "The President, First and Second Vice-Presidents, Honorary Secretary, and Honorary Treasurer, and the additional members of the Executive Committee, unless otherwise provided in this constitution, shall be elected at the business session of each Annual Meeting. They shall be elected from nominations, one or more names for each office, to be submitted by the Nominating Committee and published in the Association Bulletin at least one month before the Annual Meeting, and from such other nominations as may be made from the floor at the business session of the Annual Meeting.

The voting shall be by ballot. The poll shall be open during the Annual Meeting for such period after nominations are closed, as shall be decided by the President."

The following report was presented to the Executive Committee and accepted by that body on May 11th. Since that time all candidates have agreed to have their names placed on the ballot. The Nominating Committee is pleased to present the following report:

President:

Dr. R. Lyons, Winnipeg.

First Vice-President:

Dr. J. E. Hudson, Hamiota.

Second Vice-President:

Dr. C. B. Schoemperlen, Winnipeg.

Dr. C. H. A. Walton, Winnipeg.

Honorary Secretary:

Dr. H. W. C. North, Carman.

Dr. J. C. Rennie, Portage la Prairie.

Honorary Treasurer:

Dr. W. J. Boyd, Winnipeg.

Dr. J. McKenty, Winnipeg.

Member-at-Large, Winnipeg (for 3 years):

Dr. D. S. McEwen, Winnipeg.

Dr. F. H. Smith, Winnipeg.

Member-at-Large, Rural (for 3 years):

Dr. J. A. Findlay, Brandon.

Dr. K. I. Johnson, Pine Falls.

Dauphin; C. R. Green, Ethelbert; J. P. Gemmell, Winnipeg; T. Kinash, Gilbert Plains; M. Kozakiewicz, Swan River; H. Little, Dauphin; M. T. Macfarland, Winnipeg; T. F. Malcolm, Swan River; S. S. Peikoff, Winnipeg; M. Potoski, Dauphin, (Secretary); W. G. D. Ritchie, Dauphin; B. E. Symchych, Dauphin; M. A. Tanasichuk, Grandview (President).

Following coffee, clinical cases were presented by members of the hospital staff and discussed by the visiting clinicians.

A delicious lunch was served in the Nurses' Dining Room following which the afternoon session was held in the auditorium of the Health Unit Building. Dr. S. S. Peikoff, Winnipeg, spoke on the "Practical Approach to the Acute Abdomen," and Dr. J. P. Gemmell spoke on the subject of "Hypothyroidism." Association activities were discussed briefly by Dr. M. T. Macfarland.

A buffet supper was held at the home of Dr. M. Potoski and it was concluded that the meeting had been very successful. Appreciation was expressed to Mrs. Bednas and Mr. Schmeidl.

M. T. M.

Brandon and District Medical Association

The spring meeting of the Brandon and District Medical Association was held at Brandon on Thursday, June 2nd, 1955.

In attendance were: Doctors J. B. Baker, I. B. Barclay, M. E. Bristow, J. S. Brown, R. P. Cromarty, H. S. Evans, J. A. Findlay, F. Fjeldsted, W. Forster, J. Gill, E. L. Grossman, W. P. Hirsch, J. M. Matheson, R. F. M. Myers, M. McKenzie, R. O. McDiarmid, H. M. McIntyre, R. D. Oatway, A. H. Povah, F. J. E. Purdie, President, J. E. Rowlands, J. H. Scott, H. S. Sharpe, V. J. H. Sharpe, Secretary-Treasurer, W. Schlichter, S. D. Schultz, E. J. Skafel of Brandon; M. K. Brandt, Dauphin; J. E. Hudson, Hamiota; E. G. Karasewich, Rivers; N. M. Kester, Wawanesa; T. H. Kilby, Hartney; F. K. Purdie, Griswold; M. Tanasichuk, Grandview; J. B. Frain, J. P. Gemmell, R. Lyons, M. T. Macfarland, F. R. Tucker, Winnipeg; and several staff members.

Following informal discussions the visitors were welcomed to lunch at the Brandon General Hospital by Mr. A. K. McTaggart, Administrator, and Miss M. Jackson, Superintendent of Nurses. The afternoon clinical session was under the direction of the President and was as follows:

1. Presentation of Fracture Cases by Dr. F. J. E. Purdie with discussion by Dr. F. R. Tucker, Winnipeg.

2. Paper on "Newer Drugs in the Treatment of Arthritis" by Dr. J. B. Frain, Winnipeg.

3. "Leukemia" — presentation of a case history by Dr. R. F. M. Myers with discussion by Dr. J. P. Gemmell, Winnipeg.

The Northern District Medical Society

The Spring Meeting of the Northern District Medical Society took the form of a Clinical Day which was held at Dauphin on Thursday, May 26th, 1955. Attending were: Doctors M. K. Brandt, Dauphin; R. Buczok, McCreary; R. E. Dicks,

4. "Low Back Pain"—case presentation by Dr. Rowlands, discussed by Drs. Tucker, R. Lyons, and others.

A coffee break proved very acceptable prior to the business session which brought considerable discussion of the provision of medical and hospital care for dependents of service personnel, and civilians by service personnel, in tax-supported institutions of semi-isolated regions. A resolution was prepared for transmission to the Manitoba Medical Association Executive Committee.

Following a reception at the Hospital for Mental Diseases when guests were welcomed by Dr. S. Schultz, Superintendent, and Mrs. J. Hanna, a delicious dinner was served under the direction of Miss Thompson and staff. Entertainment was provided for the ladies while members heard a paper on "Largactil" presented by Dr. W. Schlichter.

At the continuation of the business session a resolution of the General Practitioners' Association of Manitoba concerning fees paid by Manitoba Medical Service received considerable discussion.

A vote of thanks was tendered to all who had made the meeting a success.

Medical Library Use and Abuse

Two problems have come up repeatedly in the Medical Library, concerning use of the library by Winnipeg physicians.

1. Inter-library loans, between our library and others, are made for specific periods of time. In a few cases, borrowers have retained the loans well beyond the due date, even after receipt of overdue notices from the library staff. This places our library in poor standing with our sources of loans, and can result in their refusal to allow us further borrowing privileges. In nearly all other libraries, inter-library loans may be read only in the reading-room: we may be compelled, regretfully, to adopt this rule here if loans continue to be kept past the due date.

2. About 60 doctors have been issued keys to the reading-room of our library. (No other university library in Canada issues reading-room keys to other than full-time heads of departments.) Only two dozen of these keys have been used to any considerable degree. Thanks to the generosity of

the Winnipeg Medical Society, the reading-room has been kept open from 8 to 10 p.m. five nights a week, from October to April 30th., so that adequate access is given even to non-key-holders.

During the year, graduate research workers, Fellowship candidates, etc., require after-hours access to the literature. We would therefore ask that any Winnipeg physicians who do NOT use their library keys will return them as soon as possible to the Librarian, thus making them available for loan to workers who really require them. The keys are stamped "110" and so should be easily recognizable.

These matters are brought forward, not as criticisms, but merely to facilitate the greatest possible use of library material.

Chairman, Medical Library Committee.
M. J. Ormerod,

General Practitioners' Association of Manitoba

At an open meeting held on March 23rd, 1955, the executive of the General Practitioners' Association of Manitoba was instructed to forward to the Manitoba Medical Association executive the following notice of motion, to be submitted as a motion at the annual meeting of the Manitoba Medical Association in 1955.

"Be it resolved that the Manitoba Medical Service adopt one fee across the board for all participating medical members; and this shall follow the minimum schedule of fees as prepared by the Manitoba Medical Association in 1954; and that the privilege of extra billing be granted to all specialists."

We append hereto the members of the executive of the General Practitioners' Association of Manitoba who attended the meeting on the 19th of April, 1955, held in the Medical Arts Club Rooms; and who voted unanimously to carry out the instructions of the open meeting held on March 23, 1955, at the Manitoba Medical College.

Doctors: G. F. Hamilton (Chairman), E. Johnson, A. J. Winestock, A. T. Gowron, W. J. Boyd, R. O. Flett, D. J. Hastings, A. G. Henderson, J. A. Swan, J. F. Edward.

Tuberculosis and Other Chest Diseases

D. L. Scott, M.D.

A group of physicians, interested in tuberculosis and other diseases of the chest, met at St. Boniface Sanatorium on February 7th, 1955. Dr. G. J. Wherrett, Executive Secretary of the Canadian Tuberculosis Association, was present and we were privileged to hear him speak on tuberculosis from a National viewpoint and briefly relate his impressions following a recent tour through the Western provinces.

Dr. D. L. Scott spoke of his recent visit to Great Britain and Spain. The tour of Britain involved visits to some sanatoria and consultation with the personnel of mass radiology units to compare notes about procedures, findings, etc. The Thirteenth Congress of the International Union Against Tuberculosis met in Madrid in September, 1954. This meeting was instructive and, indeed, a real display of the interest and effort in effect to combat tuberculosis throughout the world.

Dr. A. C. Sinclair and Dr. V. J. Hagen presented the pulmonary resection cases completed at St. Boniface Sanatorium during 1954. As usual there was very free discussion and comment during this presentation. This type of medical meeting is very interesting and stimulating because of its free and informal manner.

Following this Dr. E. L. Ross pointed out that this group had been meeting informally for over twenty-five years in sanatorium, welcoming all who wished to attend but the meetings have been irregular and with a changing attendance. There was a long discussion about the desirability of giving more formal recognition to this group of physicians and surgeons interested in tuberculosis and all other diseases of the chest, possibly by designating the group as the Thoracic Society of Manitoba. At the February meeting in St. Boniface Sanatorium with a view to at least making a start at organizing Dr. A. C. Sinclair accepted the responsibility of President and Dr. D. L. Scott, the duties of Secretary of this group. Such a society could be affiliated with the Canadian Tuberculosis Association as the Manitoba Division of its medical section. The interest, studies and discussions would include all thoracic diseases.

A great deal has been added to the knowledge and interest of diseases of the chest in the past five years and, no doubt, many physicians engaged in other fields of practice would welcome the opportunity to attend and participate in the informal discussion of the interesting subject of chest diseases. Therefore, all medical men in Manitoba who are interested are cordially invited to our meetings and if you wish to be notified of our next meeting please signify by writing to Dr. A. C. Sinclair, St. Boniface Sanatorium, or to Dr. D. L. Scott, Central Tuberculosis Clinic.

CALLING ALL 1930 GRADS TO ATTEND OUR 25th Reunion OCTOBER 25th IN WINNIPEG

The Class of '30 is providing the Speakers for the first session of the Manitoba Medical Association's Annual Meeting (See Program in this issue) and Harry Botterell has been appointed a member of the C.M.A. Presidents visiting team.

Be sure to plan to attend and meet many of your class buddies. The Reunion Dinner in the evening will be something to remember.

More details later.



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1. Russ, J. D.: Personal communication

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Social News

Reported by K. Borthwick-Leslie, M.D.

Letters to ye Social Editor —

No. (1) speaks ad verbatim for itself.

Royal Jubilee Hospital,
July 28, 1955.

Dr. K. Borthwick-Leslie,
Medical Arts Building,
Winnipeg, Man.

Dear Kay:

As you may know, Dr. J. D. Adamson is spending his holidays with his daughter and family near here, and we were able to arrange a meeting of most of the Manitoba graduates practicing in Victoria.

This took place last evening when we had dinner together in the private dining-room of the Oak Bay Beach Hotel. Those present were: Drs. F. M. Bryant, H. G. Grieve, C. H. Moore, D. M. Whitley, R. G. McNeeley, S. G. Ruskin, J. A. Hopkins; A. Gray, F. G. Stuart, G. F. Homer, R. G. Whithead, R. C. Anderson, F. N. Elliott, J. N. Edmison and myself.

Dan Revell, although not a Manitoba graduate was also present.

Those unable to come for various reasons were: Drs. R. A. Hunter, J. T. Cruise, G. Simpson, N. C. Cook, W. A. McElmoyle and Claude McRae.

Roy Fraser is not here now.

J. D. brought us up to date on many things related to the Medical School and the practice of Medicine in Manitoba, and we enjoyed the occasion immensely.

We thought you, as Social Editor of the Review, would be interested in having details of this reunion.

It was indeed a pleasure to visit with you earlier this year, and we hope to hear from you again the next time you are out this way.

With kindest regards,

Sincerely

H. M. Edmison, M.D.

(2) "Dear Madam (???): Kindly publish in your next column that Dr. J. S. Holowin, who has been in practice in Morris, Man., for fifteen years, is now planning on a three year post graduate course in Ophthalmology. One year at the Ford Hospital in Detroit, proceeding on a Fellowship for two years at the Watson Gailey Eye Foundation in Bloomington, Illinois. Dr. Gerhard Friesen, formerly of Plum Coulee, has taken over both home and practice of Dr. Holowin in Morris."

Thank you Dr. Holowin for your nice letter of information. The very best wishes for both your success in your P.G. work and Dr. Friesen in taking over at Morris. By the way, the Doctor's address for a year will be 19811 Lanser Road, Detroit 19, Michigan.

Being a born and raised Mordenite, the hero of the hour seems to be Dr. Walter Colert, the "spark plug" (Tribune) of the now famous Colert Beach. The brim of the hat to the Surgeon, Obstetrician, Farmer, chairman of School Board, leader of Water Ski classes, etc. All goes to show what we General Practitioners really can do if we try. All I can say, is that we Borthwicks were born some odd years too soon . . . I might even have learned to swim, had Dr. Colert been in Morden in the good old days, at the Dead Horse Creek Dam. How about it, Tony Scott? You might even be in the movies or some such.

Welcome to Winnipeg, to Dr. and Mrs. Neville Crowson, who have come from Kingston, Ont., accompanied naturally by small son Ian. Dr. Crowson will be Chief of Laboratory, Deer Lodge Hospital.

The Manitoba Clinic announces the opening of their Department of Paediatrics under the direction of Dr. William D. Bowman. De Luxe new clinic, inspected it last week for the first time, also I should think a De Luxe Department under Bill Bowman. Oh well, Norm and I acquired a new air conditioner last week. Progress forges ahead.

Richard O. Burrell, M.D., Ch.M., F.R.C.S. (Edin), F.R.C.S. (C) wishes to announce his association in partnership with Morley Cohen, M.D., Ph.D. Practice devoted to General, Thoracic and Cardiovascular Surgery. Offices 420 Medical Arts.

Dr. G. C. Fairfield has been chosen to be the Progressive Conservative Candidate in the next federal elections. From a good old Tory family, good luck and Heaven help you, Dr. Fairfield.

Mrs. L. G. Mongeon and family of four left early in July to join Dr. Mongeon in Pasadena, California, where the doctor is doing post graduate work in Neuro-surgery.

On July 22, Mrs. Helen Leatherdale, daughter of Mr. and Mrs. L. B. Edmondson became the bride of Dr. C. K. Bleeks. Following a reception at the bride's home, Dr. and Mrs. Bleeks left on an extended motor tour of the U.S.A.

I have a dirty hunch that I missed out on the Dr. and Mrs. Mel Brown's daughter's wedding, but Mel tells me the kids got back home in time to collect one of the fabulous "Daily Doubles", so guess they don't care whether we announce them or not.

Dr. and Mrs. T. H. Williams of Deer Lodge announce the engagement of Eleanor Ruth to Derek E. L. Best, son of Mr. and Mrs. C. T. Best. The wedding is to be August 5, in St. Luke's Anglican Church.

Dr. and Mrs. Wm. A. MacLean, New York announce the birth of Allan William in New York, July 19th.

Dr. and Mrs. K. O. Wylie gleefully announce the arrival of their twins, one boy, one girl on June 29th.

Dr. and Mrs. J. G. Fox also announce the birth of Nancy Eleanor, sister for Geraldine and Colleen on July 9th.

Dr. and Mrs. George Waugh announce the arrival of a baby girl on June 18th.

Mr. and Mrs. W. M. Patton (Dr. Donna Cruikshank) are happy to announce the arrival of a second son, Matthew Neil, July 19th.

P.S. August 3, 1 a.m. It's still 80°. Who wants to read or write gossip? I'm bushed. Good Night.

Obituaries



Dr. William Henry Thorpe Peake

Dr. William Henry Thorpe Peake died at his home in Transcona on May 11 at the age of 80. Born in Fenella, Ontario, he was educated at Albert College, Belleville, and Trinity Medical College, Toronto. His class was the last to graduate before Trinity College amalgamated with Toronto University.

In 1902 he came west and practised for two years in Alberta before coming to the Winnipeg area. In 1910 he settled in Transcona where he was appointed medical officer for the Canadian National Railways shops and later became district medical officer for the C.N.R. For 40 years he was medical health officer for Transcona and provincial coroner. He was interested in his church, the community and young people.

Surviving are his wife, a son and daughter, a grand niece and seven grandchildren.

Dr. Condren Maurice Strong

Dr. Condren Maurice Strong, 71, died in Deer Lodge Hospital on July 9. Born in London, England, he came with his parents first to Qu'Appelle, Sask., and later to Walsh, Alta. At 17 he enlisted for the Boer War. Working for a time as telegrapher for the Canadian Northern Railway, he later entered Manitoba Medical College and graduated in 1912. After two years of practice at Steinbach he went overseas as M.O. with the 44th Battalion. In 1919 he returned to Winnipeg after postgraduate study in London. He served on the staff of St. Boniface Hospital and for two terms was president of Misericordia hospital staff. In 1944 he was president of the Winnipeg Medical Society.

He is survived by his wife, a brother and sister.

Dr. Adam Ernest Cantelon

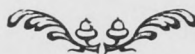
Dr. Adam Ernest Cantelon, 77, of 25 Cunnington Ave., St. Vital, died on June 5, 1955. Born in Streetsville, Ontario, he graduated from Trinity Medical School, Toronto, in 1901. He practised at Hanley, Piapot and Stoughton in Saskatchewan until his retirement in 1939 when he came to Winnipeg. He served in the first World War and in the second was Medical Officer of the cordite plant in Transcona. He is survived by his widow and four married daughters.

Dr. Herbert John Scott

Dr. Herbert John Scott, 63, died on July 6. Born in Collingwood, Ontario, he was educated at Queen's University, Western Ontario and Manitoba. He also studied at the Royal Ophthalmic Hospital, Moorfields, London, and the Presbyterian Hospital, Chicago. He served in both world wars. Originally in eye, ear, nose and throat specialty, he restricted his practice in late years to ophthalmology. He is survived by his wife and a son.

Dr. William Free Stevenson

Dr. William Free Stevenson of Belmont died at his home on May 19. Born in 1873 near Hastings, Ontario he came to Manitoba in 1890 and graduated from Manitoba Medical College in 1907. He practised continuously at Belmont from May of that year until his retirement in 1948. He was a former president of the College of Physicians and Surgeons of Manitoba. Surviving him is his wife and two sons, one of whom is Dr. H. C. Stevenson of Minnedosa. A third son was killed in 1941 while serving with the R.C.A.F.



Winnipeg Medical Society Committee Reports 1954 - 1955

Committee Reports 1954 - 1955

Report of the Secretary

To the President and Members of
The Winnipeg Medical Society:

Your Secretary submits the following report of the year's activities:

MEETINGS:

The Society met seven times during this term of office 1954-55 with an average attendance of 107. The Annual Hospital meeting at the Children's Hospital was most popular. Special guest speakers during the year were Dr. Eric M. Nanson, Professor of Surgery, University of Saskatchewan; Dr. Richard Day, Professor of Paediatrics, State University of New York College of Medicine; Sir James Learmonth, Professor of Surgery, University of Edinburgh; Professor O. Hall, Montreal; Dr. M. A. Ogryzlo of Toronto; Dr. J. B. Frain of Saskatoon, and finally Dr. Chas. Ripstein from the Albert Einstein College, the speaker of the annual special meeting with the University Post-Graduate Course.

IN MEMORIAM:

The Society observes with regret the deaths of six members: Dr. W. G. Beaton, Dr. J. C. Hossack, Dr. Solomon Kobrinsky, Dr. P. Nimilowich, Dr. I. Pearlman and Dr. H. W. Wadge.

Respectfully submitted.

A. W. McCulloch,

Secretary.

Treasurer

To the President and Members of
The Winnipeg Medical Society:

Herewith certified financial statement from our auditors, Thornton, Milne & Campbell.

Respectfully submitted.

D. L. Kippen,

Treasurer.

May 10, 1955.

The President and Members,
The Winnipeg Medical Society.

Dear Sirs:

We have examined the balance sheet of The Winnipeg Medical Society at April 30, 1955, and the statement of revenue and expenditure for the year ended on that date and have obtained all the information and explanations we have required

EXHIBITS

Statement of Revenue and Expenditure
for the year ended April 30, 1955 A
Balance Sheet April 30, 1955 B

Revenue and Expenditure

The operations for the year, as set forth in Exhibit A, have resulted in net revenue of \$1,480.26. Membership fees received are in accordance with duplicate receipts examined by us but are not subject to further verification. Adequate vouchers have been examined in substantiation of all expenditures.

In accordance with the minutes of the Council Meeting of January 17, 1955, the sum of \$1,000.00 has been placed in the Special Library Fund for the use of the Library Committee of the Faculty of Medicine. A statement of the transactions affecting this account during the year is shown in Exhibit A.

Balance Sheet

We obtained from The Bank of Toronto confirmation of the bank balances, subject to allowance for outstanding items as shown by the books.

The investments of the Society as at April 30, 1955, were as follows:

Bonds:	Cost	Par Value	Market Value
Government of Canada — 3%			
1966 fully registered	\$4,042.50	\$4,000.00	\$4,060.00
Government of Canada — 3 ¾ %			
1978 fully registered	1,473.75	1,500.00	1,612.50
Government of Canada — 3 ¼ %			
1979 fully registered	1,003.75	1,000.00	1,012.50
	<u>\$6,520.00</u>	<u>\$6,500.00</u>	<u>\$6,685.00</u>

These securities are held in a safety deposit box and were presented for our examination. All interest has been accounted for on a received basis in the books of the Society.

In our opinion the accompanying balance sheet and statement of revenue and expenditure are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Winnipeg Medical Society at April 30, 1955, and the results of its operations for the year ended on that date to the best of our information and the explanations given to us and as shown by the books of the Society.

In conclusion we wish to express our appreciation of the co-operation extended to us during the course of our audit.

Yours very truly,

THORNTON, MILNE & CAMPBELL,
Chartered Accountants.

Exhibit A

Statement of Revenue and Expenditure For the year ended April 30, 1955 General Funds

REVENUE

Annual Dues:	
Current year:	
Active members	\$3,605.00
Other members	20.00
Prior Years	97.00
	<u>\$3,722.00</u>
Bond interest	212.96
	<u>\$3,934.96</u>

EXPENDITURE

Audit fees	\$ 50.00
Bank charges	6.05
Catering	187.95
Donations	212.00
Entertainment	42.05
General expense	135.65
Manitoba Medical Association—	
office salaries	1,320.00
Printing, stationery and postage	342.60
Speakers — Honoraria	144.90
Telephone expense	13.50
	<u>2,454.70</u>

Net revenue for the year \$1,480.26

Library Fund

REVENUE

Appropriated from general surplus	\$1,000.00
Bank interest	36.92
	<u>\$1,036.92</u>

EXPENDITURE

Books purchased	\$ 713.81
Library supervision	198.00
Maintenance, binding, etc.	367.95
	<u>1,279.76</u>

Net expenditure for the year (\$242.84)



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advance*

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SOLUBLE • STABLE • NEUTRAL

More active than Aminophylline...
without its disadvantages.

Also... NEUTRAPHYLLINE WITH PHENOBARBITAL

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Exhibit B

Balance Sheet as at April 30, 1955

ASSETS

Cash:		
On hand	\$	10.00
On deposit with The Bank of Toronto	2,351.54	
	\$	2,361.54
Investments — at cost:		
Government of Canada bonds	6,520.00	
	\$	8,881.54
Special Library Fund:		
Cash — On deposit with		
The Bank of Toronto	\$	980.29
Accounts receivable — Recoverable		
overpayments on purchases	423.97	
		1,404.26
	\$	10,285.80
LIABILITIES		
Membership Fees Paid in Advance	\$	20.00
Surplus:		
Balance April 30, 1954	\$8,381.28	
Net revenue for the year as per		
Exhibit A	1,480.26	
	\$9,861.54	
Appropriated for Library Fund	1,000.00	
		8,861.54
Special Reserve — Library:		
Unexpended balance, April 30, 1954	\$1,647.10	
Net expenditure for the year as per		
Exhibit A	242.84	
		1,404.26
	\$	10,285.80

Report of Trustees

To the President and Members of
The Winnipeg Medical Society:

As Senior Trustee, I wish to report the following securities as being held in the Safety Deposit Box, Bank of Toronto, 394 Portage Avenue:

Dominion of Canada Bond, 3%, 1966	\$1,000.00
Dominion of Canada Bond, 3%, 1966	1,000.00
Dominion of Canada Bond, 3%, 1966	1,000.00
Dominion of Canada Bond, 3%, 1966	1,000.00
Dominion of Canada Bond, 3¾%, 1978	500.00
Dominion of Canada Bond, 3¾%, 1978	500.00
Dominion of Canada Bond, 3¾%, 1978	500.00
Dominion of Canada Bond, 3¾%, 1979	1,000.00
	\$6,500.00

Balance in Bank of Toronto as at
April 30, 1955

\$2,507.70

The aforesaid Bonds and Bank Deposit have been vouched for in the Auditor's Report.

I have personally inspected the office equipment of the Winnipeg Medical Society at 604 Medical Arts Building, the equipment in the Manitoba Medical College and the Lantern in care of Mr. Gordon Axtell, and found them to be as listed herein:

1 Steel Filing Cabinet, 3 Drawers; one-third interest in Elliott Addressing Machine; one-third interest in Mimeograph Machine; one third interest in Underwood Typewriter, 14" Carriage, Serial No. 5732553-14; one-third interest in Burroughs Adding Machine; one-third interest in "Copy-right" Holder.

Equipment in Manitoba Medical College:

2 Plaques-Honor Rolls of Past Presidents (in Theatre "A" of the Medical College); 1 Gavel—This gavel was made from wood from the ruins of the Royal College of Surgeons, and was presented to the Winnipeg Medical Society by the late Dr.

John C. Hossack. One Name Projector made for the Winnipeg Medical Society by Dr. T. H. Williams in the year 1951.

In care of Mr. Gordon Axtell:

1 Delineascope Lantern, Model O.J.R., 3647, made by Spencer Wells Co. of Buffalo, New York, and one spare bulb.

Respectfully submitted.

A. R. Birt,

Senior Trustee.

Membership Committee

To the President and Members of
The Winnipeg Medical Society:

The total membership for 1954-55 season is 455, made up as follows:

Active paid-up members	333
Active paid-up members, half rate	48
Associate paid-up members	10
Non-Resident paid-up members	5
Total paid-up members	396

Life Members	20
Free Membership — over 65	27
Membership fees unpaid	12
	59

Thirty-one new members have been added to the roll during the year.

Sixteen members have been lost to the Society during the year, six by death and six have left the province. There were four cancellations of membership.

Total membership for 1953-54 was 450 as against 455 for the current year, a gain of five.

Total paid-up membership for the current year is 396 as against 378 for 1953-54, a gain of 18, and the number of membership fees unpaid this year is 12 against 22 unpaid last year.

Respectfully submitted.

Murray H. Campbell,

Chairman.

Programme Committee

To the President and Members of
The Winnipeg Medical Society:

The Winnipeg Medical Society during the past year has held nine successive meetings beginning September 17th, 1954. The list of meetings follows:

September 17, 1954:

"Recent Methods in Cancer Therapy from Memorial Hospital, New York"

Speaker: Robert Cooke, M.D., F.R.C.S. (Eng.), F.R.C.S. (C.), Winnipeg.

October 15, 1954:

1. "Resuscitation"

Speaker: Richard Day, M.D., Professor of Paediatrics, State University of New York College of Medicine.

2. "Neo-natal Emergencies"

Speaker: E. M. Nanson, M.D., Professor of Surgery, University of Saskatchewan.

November 26, 1954:

"The Principles of Treatment in Peripheral Vascular Disease"

Speaker: Sir James Learmonth, Professor of Surgery, University New Buildings, Edinburgh, Scotland.

December 10, 1954:

1. "Recent Advances in Assessing the Patient for Surgery"
Speaker: M. Minuk, M.D., Department of Anaesthesia, St. Boniface Hospital.

2. "Psychiatric Treatment Units in General Hospitals"
Speaker: G. Sisler, M.D., Professor of Psychiatry, University of Manitoba.

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CONVENIENT, ACCEPTABLE
 and **ECONOMICAL** way to administer
MULTIVITAMINS
 to **INFANTS** and **CHILDREN**



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**WATER-
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MODES OF ISSUE:

8 cc.....	32 days' supply
15 cc.....	60 day's supply
30 cc.....	120 days' supply

COST PER DAY:

3½ to 4½ cents depending on
 size of bottle.

Each 5 DROP DAILY DOSE (0.25cc.) contains:
 VITAMIN D..... 1,000 Int. Units
 VITAMIN A (palmitate).... 2,000 Int. Units
 VITAMIN C..... 30 mg.
 VITAMIN B₁..... 1 mg.
 RIBOFLAVIN PHOSPHATE 1 mg.
 NIACINAMIDE..... 2.5 mg.
 PYRIDOXINE HCl..... 0.05 mg.
 SODIUM IODIDE..... 0.04 mg.

*Dose for dose, this "Frosst" vitamin
 preparation costs the patient less.*

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 MONTREAL CANADA

January 21, 1955:

Clinical programme with scientific displays, held at the Children's Hospital.

February 18, 1955:

"What the Patient Expects from the Doctor"

Speaker: Professor Oswald Hall, Ph.D., Director, Department of Sociology, McGill University.

March 18, 1955:

With the kind co-operation of the Canadian Arthritic Society.

1. "The Present Status of ACTH and Steroids in Rheumatoid Arthritis"

Speaker: M. A. Ogryzlo, M.D., Toronto General Hospital, Toronto.

2. "The Problem of Rehabilitation"

Speaker: T. E. Hunt, M.D., University of Saskatchewan.

April 5, 1955:

With the kind assistance of the Post Graduate Committee, University of Manitoba.

"Growths of the Colon"

Speaker: C. B. Ripstein, M.D., F.R.C.C., Professor of Surgery, Albert Einstein College, Yeshiva University, New York, N.Y.

April 18, 1955:

1. "The Natural History of Ulcerative Colitis"

Speaker: Arnold G. Rogers, M.D., F.R.C.P., Winnipeg.

2. "National Health in Great Britain"

Speaker: N. D. McCreath, M.D., Ch.B., M.R.A.C.P., M.R.C.P. (London).

From the above it will be seen how fortunate we were, not only in our local speakers but in the visitors from both the United States and Great Britain. Certainly the visit of Sir James Learmonth will long be remembered by all who heard him during his week's stay here.

An innovation was tried this year of having an outside speaker discuss a social-economic aspect of medical practice. In the writer's opinion we were very fortunate in having Professor Hall of the Department of Sociology, McGill University. It is my opinion that in the future this practice should be continued.

One recommendation I would like to make is that in announcing meetings, placards displaying the topic and speaker be made for each of the hospitals.

Respectfully submitted.

L. R. Rabson,

Chairman.

Report on the Health Division of the Welfare Council of Greater Winnipeg

To the President and Members of

The Winnipeg Medical Society:

Several interesting meetings of the Health Division have been held this year under the chairmanship of Mr. C. G. Kirshaw. Dr. Keith Armstrong, National Director of the Canadian Council for Crippled Children and Adults, gave a talk on rehabilitation services in Europe, and Mr. Aly Abdel Rahman Aly Fahmy of the Egyptian Ministry of Social Affairs, told of developments in health and welfare services in his country. A review of the work of the Central Volunteer Bureau was given and the help of the Bureau offered for projects in the health field.

Many committees are active, and the most recent one to be set up is a Psychiatric Service study committee. Deficiencies in psychiatric consultation and treatment for children in the care of child placement agencies and child caring institutions have been apparent. A number of Psychiatrists are giving their services voluntarily in clinics but it is impossible for them to meet all the demands. Dr. Sisler is chairman of this committee.

Respectfully submitted.

Marjorie Bennett,

Chairman.

Legislative Committee of Fifteen

To the President and Members of

The Winnipeg Medical Society:

Three members of the Legislative Committee of 15 met with Dr. Macfarland and Mr. Laidlaw in respect to certain changes in legislation regarding the Pharmacists Act.

Only a few of the changes appear to have an adverse effect on the medical practitioner concerning the operation of his own dispensary for the dispensing of drugs. Changes to rectify this situation were recommended.

Respectfully submitted.

H. Funk,

Chairman.

Library Report

To the President and Members of

The Winnipeg Medical Society:

During the past year, 301 physicians, 45% of those practicing in the city, borrowed 6,374 items, an increase of 207 over the previous year.

From the \$1,000.00 contributed by the society, 51 books were bought, 54 volumes bound, and students were paid \$238.00 for library attendance in the evening hours during the winter months.

Seven book displays were given before meetings of the Society.

On the wall of the new library which is being constructed, the University is putting up a plaque bearing this inscription:

"In grateful acknowledgment of the valuable contribution made by the Winnipeg Medical Society and for their continued generous support."

Respectfully submitted.

F. Gerard Allison,

Chairman.

Report of the Representative to the Manitoba Medical Association

To the President and Members of

The Winnipeg Medical Society:

Early in the year Dr. R. W. Whetter, of Steinbach, the newly elected president of the Manitoba Medical Association, resigned to practice in British Columbia. Dr. Ruvin Lyons, the Vice-President, assumed the duties of Acting President and has acquitted himself with distinction. Dr. S. Vaisrub was appointed editor of the Manitoba Medical Review.

Many problems affecting the profession as a whole have been discussed during the past year. A committee on Rehabilitation was established under the chairmanship of your President, Dr. F. H. Smith. This committee is endeavoring to guide the policy on rehabilitation so that all who require the service may receive it with a minimum of disturbance to the present methods of practicing medicine.

The Committee on Economics under the chairmanship of Dr. K. R. Trueman has been studying the reconsidered "Statement of Principles and Policies on Health Insurance in Canada" as proposed by the Committee on Economics of the C.M.A. The Executive Committee of the M.M.A. has approved this statement.

In January, a committee representing the various subdivisions of medicine was appointed to consider eligibility for membership, and procedures in the Manitoba Medical Service. A sub-committee was established under the chairmanship of Dr. A. Hollenberg. Several meetings have been held. To date no generally acceptable answer has been found to this very difficult problem.

Dr. J. MacDougall, on behalf of the Winnipeg Medical Society, pointed out to the M.M.A. executive that since the advent of the hydrogen bomb all Civil Defence plans have become outmoded, and that Civil Defence plans now have to be provincial in scale. The M.M.A. agreed to accept the

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responsibility of helping to plan the medical aspects of Civil Defence in Manitoba.

As you can see, you have been well served by the Manitoba Medical Association Executive which has worked very hard on your behalf during the past year.

Respectfully submitted.

A. R. Birt,
Representative.

Representative to the Manitoba Medical Review

*To the President and Members of
The Winnipeg Medical Society:*

As representative of the Winnipeg Medical Society to the Manitoba Medical Review, I submit herewith the following report:

As in other years, the Review has been most conscientious in giving adequate publicity to the affairs of the Society.

With respect to obtaining material for publication from the papers presented before the Society the situation is unsatisfactory. I am well aware of my own shortcomings in this matter. However, I feel there are two chief obstacles to obtaining the material noted above. The first is that while many members readily accept the responsibility of preparing papers for verbal presentation before the society, they are often understandably reluctant to spend the extra time and effort required for presentation as a printed article. This is particularly so where much of the material presented has been in the form of illustrations or slides.

The second is that the out of town speakers and travelling lecturers who address the society from time to time often use material which has been printed elsewhere or which they propose using for future publication in other journals and are consequently reluctant to have it appear in an abridged form in the Review.

I can offer no solution to this problem. One cannot insist upon agreement to publication as a prerequisite of the presentation of the papers to the Society without seriously hampering the program committee. Another alternative is that the Review should be satisfied with a printed report of the salient features only of each paper. Such abridgment, of course, is not always suitable to certain papers and may seriously affect the general sense of a closely reasoned argument.

Respectfully submitted.

James W. Whiteford,
Chairman.

Community Chest of Greater Winnipeg

*To the President and Members of
The Winnipeg Medical Society:*

The following is my final report of the Community Chest Campaign for 1954 conducted amongst the medical profession and allied personnel:

Our total collections were \$15,598.15. This amount was collected as follows: Hospitals and medical colleges — hospitals \$6,640.50, medical college \$427.00 — total \$7,067.50. By mail, this is, contributions sent either direct to myself or to the Community Chest office, \$8,531.00.

As you know, the medical collection was set at roughly \$18,000.00, so that we fell somewhat short of our objective. However, I believe that there is an amount, in excess of this, that was collected from medical personnel that was included in other groups such as insurance groups, civil service groups, etc., so that I would estimate roughly that the actual total amount collected from medical personnel probably was in the neighborhood of \$17,000.00. The actual number of doctors who did not contribute was relatively small, probably less than 50 out of a total of about 450, or approximately 10%.

I am not convinced that the present method of collecting through the hospitals is a good one, although it does appear to produce approximately half the total amount in a fairly short time. There is some opposition to this method of collecting and it is ineffective in some ways in that many of the

doctors are missed during this initial canvass, and it means extensive checking and another canvass or letters to get their returns. I, personally, think a more effective job could be done by a group of women, such as the Medical Faculty Women's Association, who would take it on a more detailed and personal basis. I think that after one survey, intimately, the individual donations, one can see that the most important thing in this medical group is not so much the amount that is collected, but is to get a donation from every member. I believe, also, that Dr. Hartley Smith, President of the Winnipeg Medical Society, has plans to appoint next year's chairman early, so that any change in plan can be organized and instituted at an early date long before the campaign begins.

I would like to thank the Community Chest for the generous co-operation which I received.

Respectfully submitted.

J. W. Rennie,
Chairman.

Section of Anaesthesiology

*To the President and Members of
The Winnipeg Medical Society:*

It is with pleasure that I offer the report of the Winnipeg Anaesthetists' Society.

The program for the year 1954-55 consisted of seven monthly meetings held at the Medical Arts Club Rooms:

October, 1954—Drs. T. Halkiewicz and L. Cruikshank reported the Highlights of the Vancouver Convention.

November, 1954—Dr. Otto Schmidt spoke on "Post-Delivery Resuscitation."

December, 1954—Dinner and dance for members and wives.

January, 1955—Grace Hospital presented two films: "Pediatric Anaesthesia" and "Physiology and Surgery of Patent Ductus Arteriosus."

February, 1955—Interesting cases were presented by members from the hospitals in the Winnipeg area.

March, 1955—Dr. J. Shields spoke about techniques of hypothermia in cardiac surgery.

April, 1955—Dr. R. Gordon, Secretary-Treasurer of the Canadian Anaesthetists' Society, and Dr. R. G. Gilbert of Montreal, were guests while en route to the Western Division meetings in Regina.

May, 1955—Dr. Athol Gordon will be the guest speaker and election of officers will take place.

Respectfully submitted.

Bernadine Roe,
Secretary.

Manitoba Hospital Service Association

*To the President and Members of
The Winnipeg Medical Society:*

I herewith tender to you my report for the year 1954, concerning the progress made by the Manitoba Hospital Service Association. From all angles the affairs of the Association have improved.

Firstly, there has been an excellent increase in participants—3,291 during the year and the total now is 341,472 persons enrolled. This coverage is for about 45% of the population.

Secondly, the reserves of the Association have been increased by over \$416,000, bringing the total reserves up to \$910,331.

During the year 1955, it is anticipated that smaller amounts will be added to the reserves.

Thirdly, the operating expenses for 1954 show a decrease of .8% of earned subscriptions, which is desirable.

The Manitoba Medical Association, as well as the Manitoba Dental Association have appointed advisory committees to aid the Blue Cross.

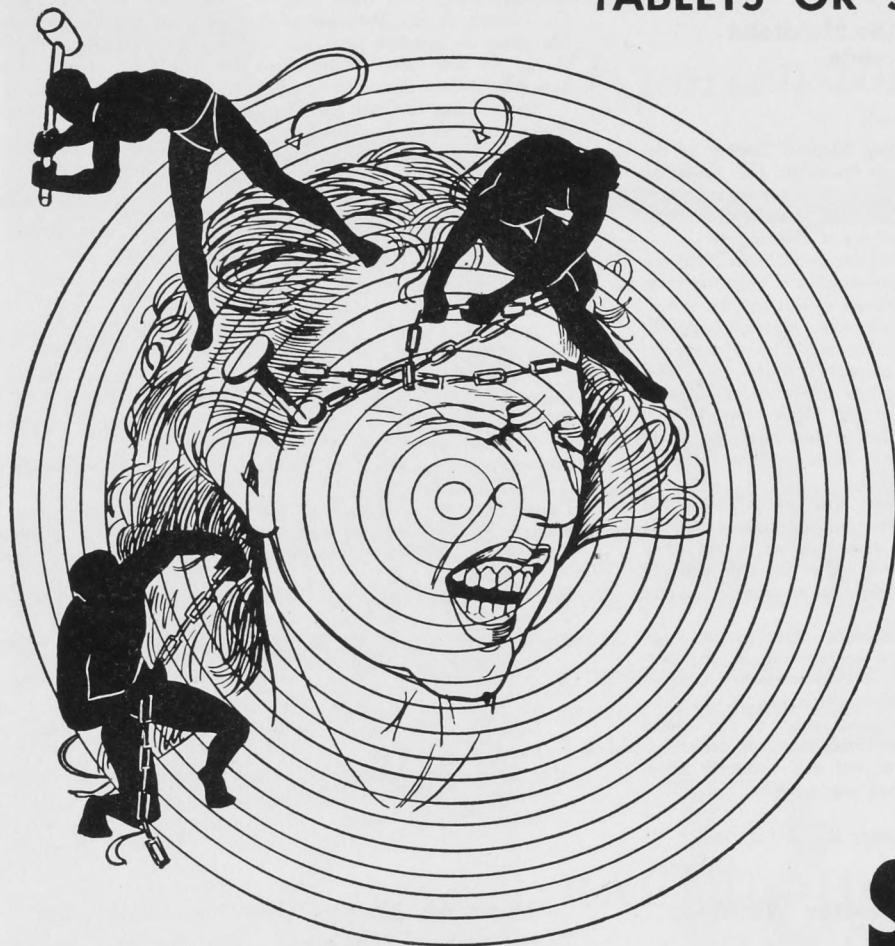
During the year 1954, two new types of contracts were brought into being, allowing for three types of contracts to be written in community plan. A national uniform contract was also made available.

Respectfully submitted.

H. C. Hutchison,
Representative.

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Medical History Section

*To the President and Members of
The Winnipeg Medical Society:*

In August, 1954, the Medical History Section suffered a severe loss in the passing of Dr. J. C. Hossack, who had been its devoted Chairman for a number of years.

In due course Prof. I. Maclaren Thompson was appointed Chairman of the Section, and Dr. Dwight Parkinson was appointed Vice-Chairman.

The Section met in the Medical Arts Club Rooms on the evening of Thursday, March 3, 1955. After dinner, we enjoyed a paper by Dr. Athol Gordon entitled "Some Inquests of Historical Interest."

Respectfully submitted.

*I. Maclaren Thompson,
Chairman.*

General Practitioners' Association of Manitoba

*To the President and Members of
The Winnipeg Medical Society:*

Following is a summary of the activities of this Association for the term 1954-55.

The executive of the G.P.A.M. meets the third Tuesday in each month (excluding July).

Each year two scholarships of one hundred and fifty dollars each, are paid out to two fifth year medical graduates.

Annually, this Association sponsors a post-graduate course. We have completed a course in Surgery; and are now organizing a course in Obstetrics and Gynecology. Lectures occur each Wednesday at 8:30 p.m. through the months of November, December, January, February and March, in the Manitoba Medical College.

As usual our Annual Valentine Dinner and Dance was enjoyed by all those attending. Each of the seven past presidents was presented with a testimonial parchment in due recognition of services rendered.

A grant of five hundred dollars was given to the Manitoba division of the College of General Practice of Canada.

This Association is encouraging the establishment of a department of General Practice in each hospital. So far this has born fruit in the Grace and Misericordia hospitals.

A general meeting of this Association was held in the Manitoba Medical College on March 23, 1955. This involved a thorough discussion of the economics of the Manitoba Medical Service as it affects the general practitioner.

Respectfully submitted.

*J. A. Winestock,
Recording Secretary.*

Committee on Civilian Defence Medical Services

*To the President and Members of
The Winnipeg Medical Society:*

During the year this Committee completed the emergency plan for the Medical Services Branch of Civilian Defence Health Services of Winnipeg. This was evolved for three varying degrees of disaster. Copies of this plan were sent to the President of the Manitoba Medical Association, the President of the Winnipeg Medical Society, and the Director of the Winnipeg Metropolitan Civilian Defence.

Doctor J. MacDougall, elected member of this committee, attended the conference of the Provincial Civilian Defence Co-ordinators at Arn Prior during the early part of March, 1955.

From the restricted information received at this conference he learned that the whole problem of medical-civilian defence should be approached from a much wider point of view. Now our present planning was obsolete except for use in natural disasters such as floods, fire, etc. Doctor Hartley Smith and Doctor J. MacDougall presented this idea to a meeting of the Manitoba Medical Association Executive, where it was decided to form a Civilian Defence Committee for Medical Health

Services at this level. It was also decided to secure the services of a full-time physician to complete a new plan on a provincial basis. The acquisition of this full-time doctor is of the highest priority.

It was recommended at the March meeting of the Council of the Winnipeg Medical Society to disband their Civilian Defence Committee and to make available any information or services for the new committee of the Manitoba Medical Association.

Respectfully submitted.

*Joe L. Downey,
Chairman.*

Eye, Ear, Nose and Throat Section

*To the President and Members of
The Winnipeg Medical Society:*

Since the last report the Eye, Ear, Nose and Throat Section of the Winnipeg Medical Society has held four meetings.

At these meetings a number of papers have been presented. Dr. J. McGillivray presented a paper on "Visual Problems in School Children." Miss Shirtliff and Dr. Robert MacNeil reported on the work of the Speech and Hearing Clinic of the Children's Hospital. Dr. Walter Alexander read a paper dealing with the Neuro-anatomy and Physiology of the Auditory Apparatus.

No unusual problems arose in the course of the year.

Respectfully submitted

*Stewart McKenty,
Secretary.*

Internal Medicine

*To the President and Members of
The Winnipeg Medical Society:*

The following is the annual report for 1954-55 of the Internal Medicine Section, Winnipeg Medical Society:

During the period 1954-55, this section held one meeting in the Medical Arts Club Rooms, on January 28th, 1955, with 25 members in attendance. Dr. L. G. Bell was chairman of the meeting.

Dr. Eric Gubbay spoke on "Fusion Beats of the Electro-Cardiogram," and Dr. A. Rogers discussed "Controversial aspects of Ulcerative Colitis."

The following officers were accepted for the year 1955-56:

Chairman Dr. L. Cherniack
Secretary-Treasurer Dr. R. M. Cherniack

Respectfully submitted.

*R. A. Polson,
Secretary.*

Report of Paediatric Section

*To the President and Members of
The Winnipeg Medical Society:*

During the year the Paediatric Section held one Scientific Meeting which was addressed by Dr. A. L. Chute of Toronto. The subject under discussion was congenital short oesophagus.

In addition the Paediatric Section made a donation to the interne's library fund at the Children's Hospital.

Further communication has been held with the Manitoba Medical Association concerning fee schedules for Paediatricians.

Respectfully submitted.

*W. C. Taylor,
Secretary.*

Public Relations

*To the President and Members of
The Winnipeg Medical Society:*

A few of the many aspects of Public Relations were reviewed at various meetings of Council. Subjects under discussion included:

1. Advisability of hiring a professional Public Relations officer.
2. "Letters to the Editor" of the local papers in which complaints of several patients were voiced.

*"She was often depressed,
dissatisfied and unhappy . . ."*

DEXAMYL* has been of remarkable value for this patient . . ."



*(This unposed photograph
was taken during the patient's interview
with her physician. The statement in quotes is from his case report.)*

'DEXAMYL' Tablets • Spansule* Capsules

Each 'Dexamyl' Tablet contains:

Dexedrine* (dextro-amphetamine sulfate, S.K.F.) . . . 5 mg.

Amobarbital ½ gr.

also available: 'Dexamyl Spansule' (No. 1) Capsules, containing the equivalent of *two* tablets
'Dexamyl Spansule' (No. 2) Capsules, containing the equivalent of *three* tablets

3. Public "paging" of doctors at football and hockey games.
4. Lectures by physicians to lay bodies.
5. Lack of publicity for the charitable medical service rendered by doctors privately and on the public wards. This very considerable contribution deserves recognition particularly now when Health Insurance and State Medicine receive so much attention.
6. Emergency medical service for holiday and night house calls.

Council's ideas on these problems were transmitted to the Manitoba Medical Association for study. It may be mentioned that The Canadian Medical Association has recently appointed a Public Relations Officer.

Respectfully submitted.

Earl Stephenson,
Chairman.

Radiological Section

To the President and Members of
The Winnipeg Medical Society:

This is to inform you that only one general meeting of the Radiological Section of the Winnipeg Medical Society was held this year. At this meeting the officers for the coming year were elected as follows:

Chairman	Dr. M. K. Kiernan
Secretary	Dr. J. B. Squire
Treasurer	Dr. W. J. Elliott

Respectfully submitted.

J. B. Squire,
Secretary.

Benevolent Fund

To the President and Members of
The Winnipeg Medical Society:

The following is a brief review of the contributions and disbursements for the year 1954-55 of the Winnipeg Medical Society Benevolent Fund.

Contributions of \$1,157.00 by 101 members.
Total Membership — 455; Contributing 22%
Average Contributions \$11.45
Disbursements, \$499.65 to three individuals.

Respectfully submitted.

T. E. Holland,
Chairman.

* * *

To the President and Members of
The Winnipeg Medical Society:

Under the present chairman, Dr. T. E. Holland, the Benevolent Fund Committee of the Winnipeg Medical Society held three meetings in the 1954-55 period. During this term the Committee made three contributions from the Fund. The recipients were one retired physician, now deceased, and the widows of two former members of the Society.

The Committee as usual commends the objects of the Fund and requests that any information regarding need among members of the Society or their dependents be brought to its attention.

Respectfully submitted.

K. R. Trueman,
Secretary.

Winnipeg Medical Society Benevolent Fund

May 10, 1955.

To the Members,
The Winnipeg Medical Society Benevolent Fund.

Dear Sirs:

We have examined the accounts of the Fund for the year ended April 30, 1955, and submit herewith the undernoted statement.

Balance April 30, 1954:

Cash on deposit with The Bank of Toronto	\$1,397.92
Government of Canada bonds—at cost 3%, 1966	1,466.25
	<hr/>
	\$2,864.17

ADD:

Donations received for the year	1,147.00
Bond interest	45.00
	<hr/>
	\$4,056.17

LESS:

Charitable disbursements	\$ 450.10
Safety deposit box rental	5.00
	<hr/>
	455.10

Balance April 30, 1955	<hr/>
	\$3,601.07

Represented by:

Cash on deposit with The Bank of Toronto	\$2,134.82
Government of Canada bonds, 3% 1966, par value	
\$1,500.00 (market value \$1,522.50), fully registered in name of Fund — at cost	1,466.25
	<hr/>
	\$3,601.07

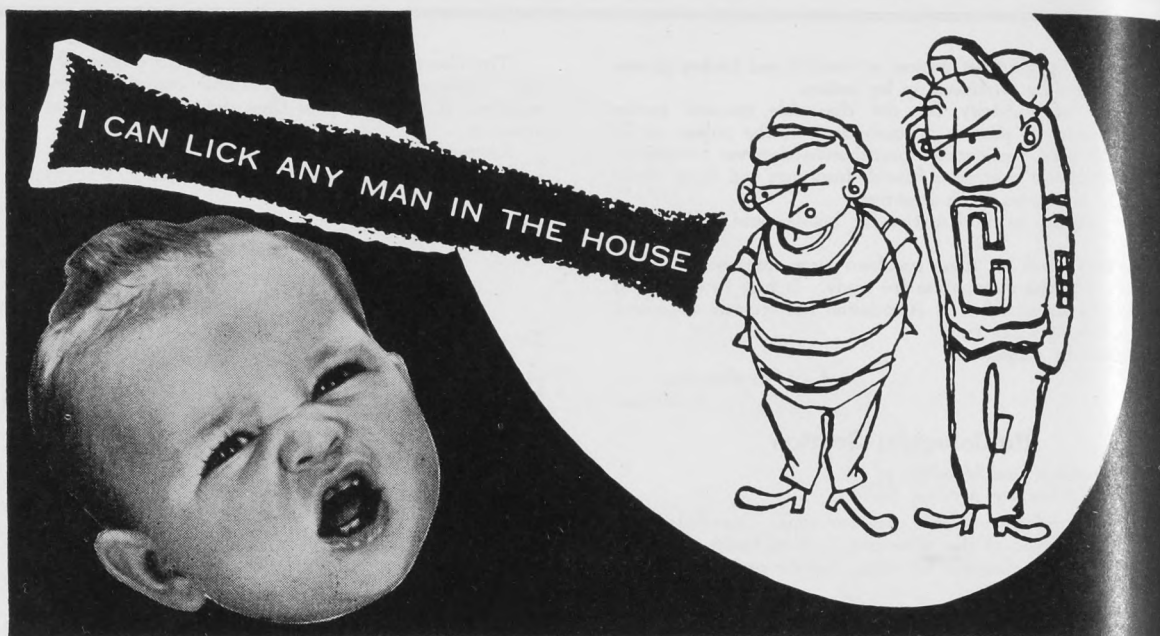
Donations received are in accordance with duplicate receipts examined by us. All disbursements made were under the signature of authorized signing officers of the Fund.

We obtained from The Bank of Toronto verification of the bank balance.

The securities are held in a safety deposit box and were presented for our examination. All interest has been accounted for on a received basis.

Yours very truly,

THORNTON, MILNE & CAMPBELL,
Chartered Accountants.



In the feeding of premature babies . . .

Borden's Dryco is a milk food of particular value. This powdered formula food possesses these desirable characteristics:

- **Formula flexibility**
- **Easy digestibility**
- **High protein, low fat content**
- **Easy solubility**
- **Increased Vitamin A & D**
- **No added carbohydrates**

Dryco—Approximate Composition

	Dry	Relieved*
Milk Fat	12.00%	1.5%
Milk Protein	32.00%	4.0%
Milk Sugar (Lactose)	46.00%	5.7%
Milk Minerals (total)	7.00%	0.9%
Calcium	1.00%	0.13%
Phosphorus	0.81%	0.10%
Water	3.00%	87.9%
Calories per oz.	119	15.75

*(1 lbs. to 2 oz. water)

Other Borden's Formula Foods



Lactic Acid Milk Powder (C.M.P. Brand)

a milk powder often indicated in special infant feeding problems. Available in vacuum packed tins for home preparation.



Starlac—

the most economical source of protein available. Starlac is an easily digested, highly palatable skim milk powder of prescription quality.



Evaporated Milk—

homogenized, whole evaporated milk, Vitamin D increased.



Nutrilac—

homogenized, partly skimmed evaporated milk. Vitamin D increased.



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an acidified milk based on Finkelstein's Formula. It is clinically proven to be helpful in the treatment of Coeliac Disease, Fermentative Diarrhoea and Premature Infant Feeding.



Mull-Soy—

an emulsified Soy Bean Food indicated as a complete milk replacement for infants allergic to milk.

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Formula Foods Dep't., Spadina Crescent
Toronto, Ontario

College of Physicians and Surgeons of Manitoba

Council Meeting (Cont.)

October 16, 1954.

D. Communication from the Chairman, Qualifications Committee, Medical Council of Canada

The Registrar advised that the question of reviewing the matter of examinations of the Medical Council of Canada by the Committee on Qualifications was considered at the meeting of the Executive Committee held September 7, 1954, and again at the Council Meeting held October 16, 1954, when the matter was referred to the Education Committee for study and report to the May Council Meeting. It was considered that the representatives to the Medical Council of Canada should have some direction from Council as to the removal of Pathology and Bacteriology as a single paper from the L.M.C.C. examinations. It was the feeling of the M.C.C. that if the various Colleges approved the removal of this examination, it would become in most provinces a basic science subject. There have also been demands year after year to add certain subjects such as Paediatrics and Psychiatry. It was suggested that since Public Health is considered a specialty, that it be dropped as a single paper and that a paper on Public Health, Psychiatry and Paediatrics might be given under General Medicine. When a decision has been taken by the M.C.C. on the various examination papers, it would take a couple of years to finalize since notice of motion and approval by the Governor-General in Council would be required.

The Registrar advised that two of the three members of the Education Committee, including the Chairman, are rural members and it may be difficult to get together for a meeting. It was suggested that the Registrar communicate with the Chairman and advise him that it was essential to have a meeting of the Education Committee considerably before the next meeting of Council so that the Executive may be able to make a decision, and that he may wish the Committee to meet with the Executive Committee and the Dean of Medicine.

It was also pointed out that the Education Committee has another matter to consider, related to this one, i.e. granting the L.M.C.C. to graduates of Canadian universities without examination, and that both problems could be discussed at the one time.

2. Business Arising from Registration Committee Meeting, October 27, 1954.

A. Question of Rebating Part of Enabling Certificate Fee

The President explained that the College collects from foreign applicants \$30.00 document-

ation fee, (of which \$5.00 goes to the University of Manitoba for assessment of basic sciences by the Credentials Committee and Twenty-five dollars (\$25.00) to the C.P. & S.) and \$25.00 for the Enabling Certificate. Following successful completion of the Medical Council of Canada examinations, candidates apply for full registration and are granted \$20.00 of their Enabling Certificate fee towards the registration fee. This was talked over at the Registration Committee meeting held October 27, 1954, and the suggestion was made that we should reconsider whether or not we should grant the rebate, or should in fact collect the fee of \$100.00 for registration.

Motion: "THAT the rebate of Twenty Dollars (\$20.00) from the Enabling Certificate fee be not credited towards the registration fee of applicants who register but do not intend to practise in Manitoba." Carried.

3. Business Arising from Executive Committee Meeting, November 24, 1954.

A. Approval of Minutes

The Registrar reported that the minutes of the Executive Meeting held November 24, 1955, had not yet been mimeographed and sent to the members of Council, and it was agreed to defer the approval of the minutes to the next meeting of the Executive Committee when both meetings could be approved.

B. Cancer Relief and Research Institute

The Registrar reported that as directed by the Executive Committee at the meeting held November 24, 1954, he had communicated with the Chairman of the Board of Trustees of the Cancer Relief and Research Institute, requesting that steps be taken to amend the Cancer Relief Act, changing the representation of this College from the present ex-officio representation, namely President and Registrar, to two members appointed by Council. He presented a reply from the Director of the Cancer Institute advising that he had been requested by the Chairman of the Board of Trustees to acknowledge the communication, and reported it had been forwarded to the Minister of Health.

The Registrar was instructed to contact the Deputy Minister of Health to see if the communication has been brought forward.

Dr. _____ stated he had not been present at the Annual Meeting of Council, but in reading the minutes of the report of the representatives to the Cancer Institute there were several criticisms which he thought should be clarified in all fairness to the Board. The Registrar advised that the portion of minutes to which Dr. _____ referred was the report of the representatives of the M.M.A. to the Annual Meeting in October which he quoted

in his report as a representative to the Cancer Institute. He further advised he had contacted the Chairman of the M.M.A. committee and told him Dr. _____ wished clarification of these matters, and that portion of the minutes had not been published in the Manitoba Medical Review. No action was taken at the Council meeting because Dr. _____ was not present. A number of recommendations at the end of the C. P. & S. Representative's Report on the Cancer Institute had been considered by the Institute.

4. Business Arising from Registration Committee Meeting, November 29, 1954.

A. Approval of Grace Hospital for Internship

By way of confirmation, the Registrar reported that at the meeting of the Registration Committee held November 29, 1954, he had been directed to forward a reply to Grace Hospital that internships had been accepted in the past from the hospital, but that each case was considered on its merits, and it was agreed to keep approval on a temporary basis. A letter of acknowledgment was presented from Grace Hospital expressing appreciation of the assistance of the Registration Committee in this matter.

B. Internship Requirement in Ontario

The Registrar advised that at the Registration Committee meeting held on November 29, 1954, it was reported that information had been received from the Registrar of the C.P. & S. of Saskatchewan, that after 1959 all aliens applying for registration in Ontario will be required to have served two years internship in addition to having citizenship, and suggesting that it might be advisable for the western provinces to consider similar action. The Registration Committee agreed that the citizenship requirement was not practical in this Province since Chinese and American applicants did not intend to remain in Canada, but wished reciprocal registration with the General Medical Council to practise in British colonies. The matter was referred to the Executive Committee or Council.

The Registrar advised he had asked for confirmation from the Registrar of the C.P. & S. of Ontario and had received a reply that the information that Ontario will require a two year internship from all candidates after 1959 was quite correct. He has not been able to get any further information whether this regulation merely applies to registration or also includes applicants for the Enabling Certificate.

5. New Business.

A. Request for Change of Name

Captain _____ completed his application form for registration as _____ (known as _____). His birth certificate was given in the name of _____, but his M.D. and L.M.C.C. were issued in the name of _____. A certificate of Registration was issued to _____ on August 25, 1954.

On November 30, 1954 his name was officially changed from _____ to _____, and the Registrar requested permission to cancel the original certificate and to issue a new Certificate of Registration in the name of _____.

Motion: "THAT the Certificate of Registration in the name of _____ be cancelled and a new one issued in the name of _____. Carried.

B. Communication from New South Wales Medical Board

A communication was presented from the Secretary of the New South Wales Medical Board advising that as and from November 10, 1954, New South Wales graduates and graduates from reciprocating countries will require to submit satisfactory evidence by way of declaration or otherwise that they have served for a period of twelve months as a medical officer in one or more hospitals or institutions (whether in New South Wales or elsewhere) approved by the Board, before they may practise in New South Wales.

C. Communication from the Medical Council of New Zealand

A communication was presented from the Secretary of the Medical Council of New Zealand, enclosing two copies of the Medical Practitioners' Amendment Act 1954, which enables temporary registration to be granted to medical practitioners who are visiting New Zealand for the purpose of post-graduate teaching or experience. In each case the applicant must either be qualified for registration or hold overseas qualifications recognized by the Medical Council. The temporary registration is to be for a period determined by the Council and may be cancelled at any time. In the case of a visitor seeking post-graduate experience the certificate will authorize practise only in a hospital or institution approved by the Council. While any temporary certificate remains in force, the holder is subject to all the provisions of the Medical Practitioners' Act 1950.

D. Communication from the Better Business Bureau

For information, the Registrar advised that a baby show had been held by a local organization and that three unregistered doctors had examined the babies. He presented a letter of explanation from the doctor who arranged for the personnel to examine the babies.

E. Purchase of Filing Cabinet

Additional filing space is required and the purchase of a filing cabinet or microfilming of records was discussed.

Motion: "THAT a four drawer filing cabinet be purchased." Carried.

F. American Medical Association Directory

The Registrar advised that the Nineteenth Edition of the American Medical Directory was being prepared, and he had suggested that the

A.M.A. supply a complimentary copy of the Directory to the various organizations which supply information for the compilation. No reply has been received.

Motion: "THAT a copy of the Nineteenth Edition of the American Medical Association Directory be purchased." Carried.

Adjournment: 10:00 p.m.



Registration Committee

January 14, 1955.

Enabling Certificates Deferred

Wasył (William) Shahariw, Certificate (in place of diploma), Donetz Medical College, 1941.

Milo Tyndel, M.D., U. Vienna, 1933; Ph.D., U. Vienna, 1948.

Ging-tong Chang, M.D., West China Union University, 1947.

Shou-I Liu, M.B., Hsiang-ya Medical College, 1939.

Lillian Chiu Lien Hsu, M.D., Cheeloo U., 1946.

Zieg Kay Kao, M.B., Sun Yat-Sen U., 1947.

Enabling Certificates Approved

Jan Wolter Oosterhuis, M.D., U. Groningen, 1951.

Ching Shing Lu, M.D., National Medical College of Shanghai, 1947.

Stefan Wozniak, M.B., Ch.B., Polish School of Medicine, 1946.

Certificates of Registration Confirmed

Christopher Francis Wolkenstein, M.B., B.S., U. Melbourne, 1947; L.M.C.C., 1954.

Min Kun Kwong, M.D., U. Paris, 1930; L.M.C.C., 1954.

Louis Heaton Valentine Longmore, M.B., B.Ch., Queen's U. of Belfast, 1940; M.D., Queen's U. of Belfast, 1945.

Carl Philip Chodynietcki, M.D., Laval U., 1949; L.M.C.C., 1949.

Certificates of Registration Granted

William Harold Ho Asjoe, M.D., Creighton U., 1953; L.M.C.C., 1954.

William Leslie Gray Quinlivan, M.R.C.S., England, 1946; L.R.C.P., London, 1946; M.R.C.O.G., 1954; M.B., B.S., U. London, 1954.

Julia Wasilewska, M.D., U. Warsaw, 1927; L.M.C.C., 1954.

James Thomson Lunn, L.R.C.P., Edinburgh, 1951; L.R.C.S., Edinburgh, 1951; L.R.F.P.S., Glasgow, 1951; M.B., B.Ch., Queen's U. of Belfast, 1951.

Certificates of Licence (Temporary) Confirmed

Margaret Loewen, M.D., Odessa U., 1939; M.D., Rostock U., 1948; L.M.C.C., 1954.

Robert Louis Grynock, M.D., U. Strasbourg, 1939; M.R.C.S., England, 1948; L.R.C.P., London, 1948; F.R.C.S., England, 1952.

David Spencer Whittingham, M.D., U. Toronto, 1950; L.M.C.C., 1950.

Specialist Committee

February 7, 1955.

A meeting of the Specialist Committee was held at 1:00 p.m., in the Medical Arts Club Rooms, on Monday, February 7th, 1955.

Present were: Dr. C. H. A. Walton, Chairman, C.P. & S.; Dr. F. K. Purdie, C.P. & S.; Dr. B. D. Best, Faculty of Medicine, U. of Man.; Dr. N. L. Elvin, Faculty of Medicine, U. of Man.; Dr. A. B. Houston, M.M.A.; Dr. P.H.T. Thorlakson, M.M.A.; and Dr. M. T. Macfarland, Registrar, C.P. & S., ex-officio.

Of the twenty-one applications considered, seven were granted specialist registration, three were deferred pending receipt of additional information, and eleven were refused because their qualifications were inadequate under the By-law of the College of Physicians and Surgeons of Manitoba.

Registration Committee

February 28, 1955.

Student Registration Granted

Louis Laurent Jules Colliou, final year student, U. Ottawa.

Enabling Certificate Deferred

Ramnarine Jaggernauth, M.D., Howard U., 1954.

Enabling Certificate Granted

Stanislaw Pogonowski, M.B., Ch.B., Polish School of Medicine, 1947.

Certificate of Registration Confirmed

James Sylvester McGoey, M.D., U. Toronto, 1943; L.M.C.C., 1943; Cert. Gen. Surg.

Certificate of Registration Granted

Emrys Peregryn Evans, M.R.C.S., England, 1943; L.R.C.P., London, 1943.

Certificates of Licence (Temporary) Granted

Edward Percival Carrigan, M.B., Ch.B., U. Liverpool, 1952.

Yale Knox Carter, M.D., C.M., Queen's U., 1953; L.M.C.C., 1953.

Registration Committee

March 7, 1955.

Enabling Certificate Deferred

Milo Tyndel, M.D., U. Vienna, 1933.

Enabling Certificates Granted

Wasył (William) Shahariw, Certificate, Donetz Medical College, 1941.

Jan Wolter Oosterhuis, M.D., U. Groningen, 1954.

Woldemar Artes, M.D., Donetz Medical College, 1936.

Edward Schludermann, M.D., U. Vienna, 1932.

Chen-en Lu, M.D., West China Union U., 1949.

Certificates of Registration Granted

John Silinsky, M.D., l'Aurore U., 1948.

Beryl Mercy McQueen, M.R.C.S., England, 1938; L.R.C.P., London, 1938; M.B., B.S., U. London, 1940.

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THERAPEUTIC AMOUNTS.

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IS A SOUND,
NEW APPROACH
TO VITAMIN THERAPY
AND QUITE WORTHY
OF YOUR
INVESTIGATION.



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Department of Health and Public Welfare

Comparisons Communicable Diseases — Manitoba (Whites and Indians)

DISEASES	1955		1954		Total	
	April 24 to May 21, '55	March 27 to April 23, '55	April 18 to May 15, '54	March 21 to April 17, '54	Jan. 1 to May 21, '55	Jan. 1 to May 15, '54
Anterior Poliomyelitis	1	0	5	4	3	28
Chickenpox	60	96	136	140	688	837
Diphtheria	0	0	0	0	1	0
Diarrhoea and Enteritis, under 1 year	3	4	18	10	16	64
Diphtheria Carriers	0	0	0	0	2	0
Dysentery—Amoebic	0	0	0	0	0	0
Dysentery—Bacillary	2	0	2	5	4	11
Erysipelas	1	2	4	3	6	14
Encephalitis	0	0	0	0	0	0
Influenza	33	44	14	14	97	46
Measles	149	275	124	40	1775	457
Measles—German	4	8	0	3	51	9
Meningococcal Meningitis	1	0	2	1	8	5
Mumps	80	115	147	151	695	707
Ophthalmia Neonatorum	0	0	0	0	1	0
Puerperal Fever	0	0	0	0	0	0
Scarlet Fever	9	10	47	60	91	301
Septic Sore Throat	1	2	12	3	10	34
Smallpox	0	0	0	0	0	0
Tetanus	0	0	0	0	0	0
Trachoma	0	0	0	0	0	0
Tuberculosis	43	39	73	38	173	198
Typhoid Fever	0	0	0	0	0	2
Typhoid Paratyphoid	0	0	0	0	0	0
Typhoid Carriers	0	0	0	0	0	0
Undulant Fever	0	0	1	0	0	2
Whooping Cough	21	32	8	12	286	40
Gonorrhoea	81	71	95	117	385	508
Syphilis	4	7	11	9	50	38
Jaundice Infectious	20	20	48	43	128	165

Four-week Period April 24th to May 21st, 1955

DEATHS FROM REPORTABLE DISEASES

May, 1955

DISEASES (White Cases Only)	*828,000 Manitoba	*861,000 Saskatchewan	*2,825,000 Ontario	*2,952,000 Minnesota
Anterior Poliomyelitis	1	3	6	10
Chickenpox	60	13	1328	---
Diarrhoea and Enteritis, under 1 year	3	12	---	---
Diphtheria	---	1	---	4
Diphtheria Carriers	---	---	---	---
Dysentery—Amoebic	---	---	---	4
Dysentery—Bacillary	2	---	6	2
Encephalitis Epidemic	---	---	---	---
Erysipelas	1	---	---	---
Influenza	33	2	70	6
Jaundice, Infectious	20	71	37	115
Measles	149	4	2450	656
German Measles	4	---	3055	---
Meningitis Meningococcus	1	1	4	6
Mumps	80	2	1463	---
Ophthal. Neonat.	---	---	---	---
Puerperal Fever	---	---	---	---
Scarlet Fever	9	5	254	72
Septic Sore Throat	1	18	5	31
Smallpox	---	---	---	---
Tetanus	---	---	---	---
Trachoma	---	1	---	---
Tuberculosis	43	14	95	123
Tularemia	---	---	1	1
Typhoid Fever	---	---	2	1
Typh. Para-typhoid	---	---	1	---
Typhoid Carrier	---	---	---	---
Undulant Fever	---	---	3	14
Whooping Cough	21	18	348	66
Gonorrhoea	81	---	137	---
Syphilis	4	---	36	---

*Approximate population.

Urban—Cancer, 56; Measles, 1; Pneumonia, Lobar (490), 2; Pneumonia (other forms), 16; Syphilis, 2; Tuberculosis, 2. Other deaths under 1 year, 16. Other deaths over 1 year, 223. Stillbirths, 15. Total, 333.

Rural—Cancer, 28; Influenza, 2; Pneumonia, Lobar (490), 2; Pneumonia (other forms), 9; Syphilis, 2; Tuberculosis, 6. Whooping cough, 1. Other deaths under 1 year, 17. Other deaths over 1 year, 215. Stillbirths, 9. Total, 291.

Indians—Cancer, 3; Influenza, 1; Diarrhoea and Enteritis, 1. Other deaths under 1 year, 1. Other deaths over 1 year, 9. Total, 15.

Anterior Poliomyelitis—One new case during this four week period. This was a man aged 32 years with paralysis — a rural case. Vaccination has continued without trouble and will be pretty well completed by June 24th. If all goes well more vaccine will be available by October and the age group eligible to receive this vaccine will be extended.

Typhoid Fever—At date of writing (June 9th) we appear to have a young married man suffering from this disease. Origin of infection not yet discovered. Typhoid has been so rare in the past few years that every case is a challenge. More information in the next issue we hope.

Victorian Order of Nurses

The physicians of Manitoba, especially those practising in the Greater Winnipeg area, are aware that the Victorian Order employs only registered nurses to carry on its service. However, it may not be so well known that two schools of nursing in Winnipeg have for some years requested a short period of observation with Victorian Order for their student nurses. These requests have been granted, and the observation experience has proven valuable both from the students' point of view and of the Victorian Order.

Our nurses find it interesting and stimulating to have a student nurse accompany them, and there is also the reward of a substantial number of applications for Victorian Order staff positions after graduation.

We give the students general knowledge about a visiting nurse service—how it functions, the variety of service which it gives and the ways in which it co-operates with other agencies in the community. They observe how nursing procedures are adapted to the individual need of the patient and the equipment available.

A student reporting to her school of nursing on her V.O.N. affiliation wrote: "My affiliation helped me to appreciate the value of really good nursing care. It made me realize how important the bed bath, good positioning, and all the little comfort measures we know about actually are to the patient.

I learned about the importance of health instruction. I saw many examples of the way in which health teaching helped the patient and family to cope with illness in the home and how young mothers were helped to care for themselves and their babies. It was interesting to note that some patients had evidently been given very good instruction before they were discharged from hospital and that others had no idea what to expect when they got home. I feel that these observations will help me to give more adequate and intelligent health instruction to my patients in the hospital."

"Finally I think that my V.O.N. experience has helped me to see the patient, not as just an isolated illness, but as a functioning member of the family and community. I have become more aware of the many problems with which the patient must deal—his worries about his family, his job, his financial difficulties, and all other problems which worry him. Therefore, I feel that my experience will help me to allay the fears of my patients because I am better able to tell them what to expect and what can be done for them."

We in the Victorian Order are happy to take part in a student affiliation as described above. The student observes our work for two days. Nursing care is provided entirely by registered nurses working under instruction of the attending physician.

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